



Francis Ho considers the 2017 iteration of FIDIC's client/consultant model services agreement [FH marks taken in]

TAKING THE FIFTH

ADJUDICATION IS A PRE-CONDITION TO ANY ARBITRATION. THERE MAY BE CLAIMS WHICH PARTIES CONSIDER INAPT TO ADJUDICATE, IN WHICH CASE THIS SEEMS BURDENSOME

An updated Yellow Book served as proxy for FIDIC to preview its 2nd edition works contracts at December's London Users Conference. For many, the prospect of far-reaching amendments sent shivers down the spine.

We frequently lament that construction is rooted in the past. Yet few in any industry enjoy upheaval. But if the draft Yellow Book stirred the global community, this year's White Book barely raised a murmur. There's generally less interest in standard form consultancy agreements. Employers fear bias in those from professional bodies while alternatives are uniformly derided. Consultants don't build so their contracts are straightforward to craft from scratch. Diversity in consultants' roles and importance further justifies a tailor-made approach.

The kicker, of course, is that clients considered the White Book too consultant-friendly. Traditionally, publishers haven't helped by isolating consultancy agreements from works contracts – indeed, FIDIC

employed separate steering committees for years. If this meant to embrace those willing to mix and match, it didn't work. Connective offerings drive sales, as Apple knows. Hence the progressive approach of IChemE, ACA and others of reflecting core principles across suites.

FIDIC hasn't followed suit but its changes and clarifications in the 5th edition better reflect current market expectations. We see this with the consultant's duty of skill and care in carrying out services finally being upgraded to good industry practice. Notoriously, liability for all obligations was previously subject to a lower benchmark.

The organisation talks of innovation in incorporating fitness for purpose. In truth, the provision pays lip service to heftier commitments under the Yellow and Silver Books.

Elsewhere, one detects British influence. Perhaps aware of NEC's growing mindshare, FIDIC has introduced a mutual requirement to act in good faith and in a spirit of mutual trust. Endorsed by



the Latham Report, this idea has momentum despite worries over legal interpretation. Similar concepts are enshrined to varying degrees within civil and mixed legal systems.

On the matter of disputes, adjudication replaces mediation. There are departures from the UK statutory regime. Ambush is difficult since an extended negotiation process must first be navigated. The adjudicator has 56 days to give a decision and, unless either party objects within 28 days, that becomes final and binding. Awards can be enforced in arbitration though the choice of governing law will affect whether arbitrators may decline to do so for breach of natural justice, lack of jurisdiction or another issue.

Adjudication is a pre-condition to any arbitration. There may be claims which parties consider inapt to adjudicate, in which case this seems burdensome. Regardless, adjudication has been significant where it has been adopted and it will be

FOR ICONIC PROJECTS, CLIENTS OFTEN PREFER TO OWN ALL INTELLECTUAL PROPERTY AS THIS ENSURES FLEXIBILITY AND CONTROL

interesting to see its reception in other jurisdictions. Intellectual property remains vested in its author, with a widely-framed licence permitting the client to use and copy the consultant's and in turn providing certain permissions for the professional's services. Clients will note that the consultant's licence is revocable if they are in default of payment. For iconic projects, they often prefer to own all intellectual property as this ensures flexibility and control.

The 4th edition contained a monetary limit on liability and a net contribution clause. It also included the mutual exclusion of consequential loss. This has been made more explicit in the new version and covers loss of profit. These caps are likely to form a key discussion.

If the consultant is appointed as contract administrator, the client must indemnify it against claims by the works contractor. In English law, such cases are doubtful unless fraud or bad faith can be established, with the doctrine of pure economic loss denying tortious responsibility in negligence. Clients may wonder why they should cover such risks. Contract administrators are not obliged to be impartial but that does not mean they operate under duress.

Similarly, clients will be disappointed that if they determine the consultant's engagement for convenience, they remain prohibited from fulfilling the outstanding services either themselves or through others. A no fault divorce could bear mutual benefits. Clients would be able to use it to smoothly replace a misfiring consultant without having to convey the suggestion of impropriety.

Thus flaws remain but the new White Book shows worthy progress.

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Jim Mason 'Smart' contracts could be the next big thing in construction technology but will developers learn the lessons of BIM implementation? Sometimes it's better to keep things simple

GET SMART

Anecdotally, we hear that clients are deterred by BIM because it requires a massive amount of information and upfront decision-making. Anyone building their own house must prepare themselves for the onslaught of choice and ensuing consequences raised during the project. Do they want to answer all these points upfront? Not a chance. They want to get going, see what happens and hope for the best. We have all watched Grand Designs and know how this usually ends.

Another "problem" with BIM is that it is very much the here and now in terms of people needing to make it work and this

becoming their day job. The industry is going through the hard yards of BIM familiarisation and is labouring up a difficult learning curve. We much prefer to contemplate developments over the horizon where we can indulge in some crystal ball gazing. This article is very much written in this spirit and describes what may be the next big thing to follow BIM – intelligent (or "smart") contracts.

There is a basic difference between the human mind and computers. The human mind is skilled at prioritising multiple sources and large volumes of information. A computer processor is

good at gathering large volumes of data from multiple sources but does not necessarily recognise what to prioritise. This limitation can be addressed with clever programming but nevertheless represents one of the biggest obstacles to realising the ideas set out below any time soon.

The point is that we prefer easier-to-use technology than BIM. We are used to limited choices and instant results. These can be apps on our smart phones which make life easier for us, from getting from A to B whether by train or by cab, or booking holidays through

person-to-person networks. We only need to spend a moment to have complex transactions made and paid for.

One of the benefits of intelligent contracts is the built-in simplicity. The standardisation and automation of the process removes those difficult decisions and not properly thought-out consequences. The process is stripped back to the basic pay/build function of a contract and we do not need to concern ourselves with the workings. Enquire further and this will reveal a network of data sensors, automated ledgers and potentially even crypto-currencies.

The process can be described thus: the operative (whether human or robotic) inserts the brick in the wall. The presence of the brick is recorded by the sensor. The quality of the installation is checked against the desired criteria. The presence of the warranty information is verified and payment is released to the installer/supplier.

The transactions can be recorded on a distributed ledger using "blockchain" technology. The blockchain has been heralded as a major breakthrough and is really just a huge string of data to which individual transactions can be recorded in minute detail – literally brick by brick if required – think of an "inchstone" approach to building rather than the traditional milestone.

The quality-checking function can be automated using technologies currently being developed. As alluded to, the

prioritising of the data requires attention and continuing human involvement.

Intelligent contracts probably require a BIM-type model on which to base its assumptions as to the fulfilment of the planned versus actual performance. Another potential route for development is to be independent of BIM and take an app-type approach to intelligent contracts. This is a semi-automated position where the certifier takes images of the work and materials for checking. The checking is performed automatically together with the cursory manual inspection of the priority areas.

Other contractual safeguards needed for the implementation of intelligent processes include lodging/checking of the warranty information. The blockchain could provide the means by which this is achieved as well as the record of the financial transactions.

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Intelligent contracts could lead to huge savings in the time and resources employed in projects. Arbitrary deductions for retention and defects would be replaced with valuations based on the quality checks with a high degree of granularity. Issues would be flagged up and addressed at the time of construction/installation and payment made conditional on their resolution. The whole defect liability period with the

usual reluctance of the subcontractors to re-attend site would be removed.

The landscape in which intelligent contracts might operate in construction is unexplored territory and requires research and development in order to make sense of it. The temptation to set off in a different direction to BIM ought to be resisted as far as possible.

Intelligent contracts should be complementary to the developments of the last twenty years and to build on them. That said, no-one should overlook the basic approach we should all take to technology – keep it simple stupid.

Jim Mason is programme leader of the masters in international construction law at University of West of England (UWE) Bristol. UWE Bristol is hosting a launch event for intelligent contract research at a conference on 13 September 2017. Booking available #smartuwe