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"New Frontiers - Trends in Risk Allocation and Contract Forms"

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Introduction

The construction industry has a reputation as being an industry in which conflict is common place. Whether such reputation is justified is a topic for debate, but on another day. There are certainly unique factors which operate to create challenges in the delivery of projects, some are:

(i) Each project encounters unique factors, such that each project is a prototype. The challenges presented by the site and weather conditions will be unique, even on those rare occasions where the design has previously been used.

(ii) The industry involves the delivery of projects requiring a variety of skills and expertise, it is rare for all the relevant experience can be found in a single organisation. Consequently, skills in process management are essential. These problems can be compounded by extended sub-contracting chains, which is a particular problem in Hong Kong. However, in the international arena (in most markets) the challenge will be to identify competent and cost effective local supplies of labour.

(iii) Traditionally the industry has involved substantial sums, but traded on narrow margins, leaving little scope for the unexpected or error. Cashflow has been described as the lifeblood of the industry.

(iv) The obstacles to market entry, at certain levels of the industry, are low, resulting in a "price" focus. In other areas overcapacity has had a similar effect.

(v) As a consequence of the number of stakeholders in a project, interface and conflicts of interest multiply and require careful management.

The formal[1] mechanism used to manage these issues is a contract. Contracts come in a wide variety of forms, from the simple oral contract we enter into every time we buy something at a supermarket through to sophisticated written instruments. All these forms however have one thing in common namely that they allocate risk in respect of a particular transaction. In this paper I will focus on the approaches taken to larger, higher value projects.

A view of the appropriate allocation of risk was expressed by Max Abrahamson[2], who suggested a party should bear the risk where:

(i) the risk is within the party's control i.e. if it comes about it will be due to wilful misconduct or lack of reasonable efficiency or care of that party; or

(ii) the party can transfer the risk e.g. through insurance, and it is most economically beneficial to deal with the risk in this fashion; or

(iii) the preponderant economic benefit of controlling the risk lies with the party in question; or

(iv) to place the risk upon the party in question is in the interests of efficiency, including planning, incentive and innovation efficiency; or

(v) if the risk eventuates, the loss falls on the party in the first instance, and it is not practicable or there is no reason under the above principles, to cause expense and uncertainty by attempting to transfer the loss to another [3].

The author closes with the telling observation that the job of trying to balance the five principles in practice is a hard one, but it is best to work from declared principles rather than undeclared and perhaps unconscious prejudices.

An extensive review of risk assessment was undertaken by Jesse B Grove in the course of preparing his "Review of

General Conditions of Contract for Construction Works for the Government of the HKSAR" (the "Grove Report")[4] in his report he summarised a perceived ideal allocation of risk, and concluded that the Abrahamson test represented the closest to an "acceptable formula" for risk allocation. It is interesting that the Grove Report was made public shortly after FIDIC published its 1999 editions which represented a shift in risk allocation towards projects sponsors, which may lead one to question the acceptability of the Abrahamson formula in the practical environment.

Other academics and practitioners have written at length on the topic, with broadly similar conclusions being reached[4]. In practice, of course, such theoretical or ideal standards are tempered by the reality of the given situation. It should also be recognised that the tests themselves involve an element of subjectivity. A classic example would be the debate over which party is best placed to deal with the risks associated with inclement weather. A wide variety of practical factors operate to influence the selection of a particular approach.

The purpose of this paper will be to look at some trends in the forms of construction contract we see being adopted.

Polarisation

At the heart of this paper is the notion that there appears to be a growing polarisation in the approaches taken between the advocates of a collaborative approach to procurement and rights dominated procurement. Conferences and learned writings are in my experience dominated by those from the collaborative wing. In practice, however the debate seems to be far less clear, with the use of rights dominated procurement remaining common place. In the course of this paper I address a number of different procurement approaches, as illustrated in Figure 1.

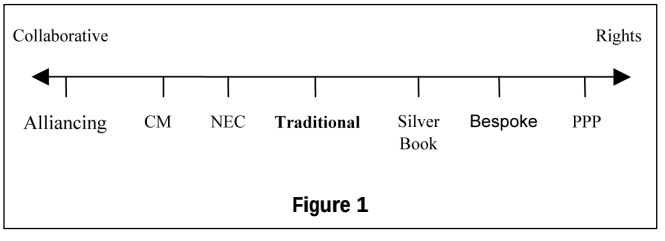

Figure 1

It will be appreciated that the position that any contract form is placed in on this scale will be influenced by the project specific nature of any particular contract and the subjective assessment of any particular risk.

As our practices became more regional and international in focus, we must recognise that the norms in a particular market will influence the allocation of risk. One example of this, from our own market, is the use of project specific companies by leading developers which have few assets beyond the sale proceeds of a particular project. These companies provide little payment security for contractors, but there is no difficulty in identifying contractors willing to tender for such projects. This, no doubt, reflects the fact that there are few examples of such companies defaulting on their payment obligations.

Similarly, the market's capacity to accept risk changes with time, thus for example international enterprises trading in mainland China used to invariably insist that their contracts were governed by a foreign legal system. Whilst this remains an issue, we see a growing willingness of international parties to accept the use of the Chinese legal system.

Bearing this background in mind, I wish to look at some of the approaches currently being adopted, and consider what the implications are for the industry as a whole.

Private Public Partnership ("PPP")

I have placed at the most extreme end of the rights dominated forms of approach the PPP approach to procurement. This is perhaps one of the more debatable decisions, since risk allocation will depend on the specific nature of the project under consideration. Some PPP projects involve no or only a limited construction element, my comments are less relevant to these projects than those that involve a new build. Broadly, under this approach the procuring entity passes across to the service provider all risks associated with the project. Not only does this risk involve the delivery risk, it often also involves some element of user risk. In some instances, for example a toll road, the entirety of the user risk can be passed across to the provider [5]. This

approach has been used to procure a wide variety of projects including schools, hospitals, prisons and social housing. Little progress has been made in the development of this approach in Hong Kong, although a number of projects are currently being developed in Singapore using this model[6].

These projects are complex, involving in practice a multiplicity of parties who accept a part of the risk. Engineering expertise can be called in at many different levels. A project will typically have a number of sponsors, including those responsible for equity investment and often a participant specialising in infrastructure development. This investor may take on the role of contractor or may tender the project to interested third parties. In the procurement phase engineering expertise will be called in to perform roles in the preparation of design, the checking of designs and also potentially as an adviser to those providing the finances. During the operation phase of the project, engineering expertise may well be required for the purposes of ensuring the correct operation and maintenance of the plant. Given the complex nature of these projects and the multiple contractual arrangements which are entered into, it is difficult to draw any broad conclusions regarding the nature of these contracts and what may lie in store for those involved. In terms of broad generalities, projects of this sort are often funded by project specific or non-recourse funding. This means that the revenues generated by the project are seen as being the source of funds to repay borrowings and to provide a return to investors. With these goals in mind care will be taken to protect the company building and operating the facility from risk, to the extent that this is possible. Within the context of such a project, procurement of construction expertise is likely to take place using a design and construct form of contract where the construction risks are either passed to the contractor to address or addressed by way of project insurance. The principal design engineer is likely to be a participant in the contracting team, as a sub-contractor or as part of the contractor's in-house resource.

In the context of a PPP project, the type of construction contract which was likely to be used will be one where the risks are broadly passed across to the contractor as the party considered best able to deal with them. The financiers will certainly resist the suggestion that the project company bear those risks. Typically, the form of contract which will be used as the starting point is the FIDIC Silver Book.

The Silver Book and FIDIC Forms

The Silver Book was initially published in 1999, at a time when FIDIC updated its whole suit of forms. It was a new form and seen as something of a radical shift in the approach which FIDIC had previously taken to risk allocation. A number of commentators argued with some force that the Silver Book represented a radical shift in risk allocation by FIDIC [7]. The complaint was that the Silver Book placed considerably more risk with the contractor, and there was a suggestion that such risk allocation was unfair and indeed in some cases inappropriate. Our own experience is that the Silver Book has attained a broad measure of acceptance by the international contracting community, recognising that it is a vehicle which permits the prosecution of projects which might not otherwise be pursued.

In addition to the Silver Book the suite of forms published by FIDIC in 1999, included a Red Book, Yellow Book and a Green Book. The updated forms were seen as being prepared in a more user friendly format than their predecessors. One of the elements which the drafts placed an increased emphasis upon was the requirements for notice to be provided.

The Red Book is intended to be used on projects where the project sponsor has engaged a consultant to undertake the design and the contractor's role is to construct in accordance with the design. Within this form there is provision for the possibility that the contractor will accept responsibility for some aspects of the design, but the general principle is that it will not accept design responsibility. We continue to see the FIDIC Red Book used quite widely. However, it is often the subject of heavy editing, to remove the pro-producer or contractor elements

of the form, producing a document which is more akin to the Silver Book at its conclusion. On some occasions the amendments recognise the original form of the contract, however more often than not they take the form of bespoke forms of contract. One issue that we see repeatedly in practice in respect of these forms, is that users tend to take insufficient care in understanding the specific rights and obligations which govern the particular form of contract that they are operating under.

In the interests of enhancing cross agency co-operation a number of multi-lateral development banks [8] decided to produce a standard form of contract for use on their projects. The agencies chose to take the 1999 FIDIC Red Book as the starting point for their form [9]. The form is known as the "MDB Harmonised Edition" [10]. Risk allocation within the form follows the approach adopted in the Red Book but is subject to a number of shifts of the balance in favour of the project sponsor. These include:

(i) narrowing the definition of "Unforeseeable" so the contractor's entitlement in respect of Unforeseeable ground conditions is reduced;

(ii) permitting the project sponsor to modify the authority of the supervising Engineer and the identity of the Engineer without the contractor's agreement;

(iii) removing the restrictions upon the circumstances in which the project sponsor may rely on the performance bond provided by the contractor which are contained in the FIDIC Red Book; and

(iv) limiting relief for force majeure to its effect on substantial obligations (rather than all obligations).

The intention of the authors of the MDB Harmonised Edition is that the form be used largely unamended, possibly with country specific variations. This is particularly likely to be necessary in the area of liquidated and ascertained damages, which are the subject of different interpretation and statutory provisions in a variety of jurisdictions. One of the consequences of this is that international participation on such projects should be enhanced since contractors are likely to be asked to undertake a known and accepted package of risk. The approach will also serve to limit the need for negotiation between agencies, between agencies and host governments and between project sponsors and contractors, thereby increasing both transparency and efficiency.

The Yellow Book, like the Silver Book, is to be used where responsibility for the design is to be passed across to the contractor. The Green Book is a minor works form, which we see less of in practice.

FIDIC remains one of the most widely used starting points. The decision of FIDIC to produce an official Chinese translation of its forms has advanced the recognition afforded to the forms in the mainland, resulting in their wider adoption. In particular we have seen a fairly wide use of the Silver Book and Red Book on both civil and building projects, the latter trend being particularly interesting because the forms are, perhaps, written with civil work more in mind than building work.

Bespoke Forms

No discussion of contract forms currently in use would be completed without some reference being made to bespoke forms. These come in a wide variety of shapes and sizes. As a result, it is difficult to comment on the generality. There are however some common features that we see with increasing frequency.

There is a growing tendency to produce pro-sponsor forms[11], recognising the use of financing models where the viability of the project depends upon delivery of the infrastructure within a tight specified budget. One of the arguments advanced in support of this kind of approach is that it delivers greater price certainty to the project sponsor. Our own experience is that this is true, but only to a point. Where a project budget is inadequate and the contractor's losses are unsustainable it is common to see either dispute or a decline in quality and productivity.

Another trend is that the contractor's limited rights to seek additional payment or time, are further constrained by the increasing use of notification provisions within contracts. The general justification for the inclusion of notification provisions within forms of construction contract is to better

assist the project sponsor in managing the project. This necessarily implies that the information requested will be delivered in a timely manner in order to better inform the decision making processes. Moreover, it assumes the project sponsor will resource its project team in a way which permits it to exploit the information provided in its decision making process. This does not always seem to be the case. Some contracts require information to be provided within short periods, which I am told by my contractor friends are difficult if not impossible to meet in practice. Others require the provision of information which may be difficult or expensive to collect and collate. Some contractors therefore complain that these provisions are added primarily to constrain legitimate entitlements. There remains an ongoing discussion within the legal community (and others interested in such things) as to the effect of time bars and the operation of the prevention principle. The prevention principle is the idea that a party cannot benefit from its own wrong, a concept widely acknowledged in both common law and civil jurisdictions. In the common law jurisdictions this has led to a principle that a project sponsor who delays completion of a project cannot preserve a fixed completion date unless there is some way in which the contractor can be compensated for the consequential delays. Our own experience is that provisions of this sort are often not enforced in practice, but are relied upon perhaps more often as a negotiating counter to press a contractor to reduce its claims. If relied upon in formal proceedings, arbitrators may on occasions perform intellectual somersaults to avoid the impact of the provisions, however generally the provisions are enforced and therefore a contractor who ignores them does so at its peril. Criticisms of this approach should also be placed in its historical context, where there was a tendency for contractors at the conclusion of projects to develop claims based upon events occurring during the course of a project. Project sponsors complained that in the context of such claims, that their conduct may have been different had the possibility of a claim been known to them at the time.

The trend within bespoke forms is likely to continue, whilst contractors continue to accept such risks and place little or no premium against them.

NEC Engineering and Construction Contract [12] ("NEC" Form)

In terms of the more collaborative approach to contracting, one of the early steps in these directions was taken by the publication of the New Engineering Form of Contract. The NEC Form was initially published in 1993, the latest edition was published in 2005. This form of contract was unique in a number of ways. The brief given to the original authors was to "lead a fundamental review of alternative strategies for civil engineering design and construction with the objective of identifying the needs of good practice".

It sets itself the ambitious target of addressing the relationship of all parties in the construction process. The traditional forms of the contract to which I have already made reference address the position of the principal contractor and possibly nominated and selected sub-contractors. They do not however manage the interface between the main contractor and domestic sub-contractors or between the consultants and the employers. The NEC took on the challenge of addressing all of these relationships, with a view to developing a consistent approach.

They also sought to address all the traditional disciplines and probable forms of risk allocation, providing users with a menu of options from which to select in the context of their particular contract [13]. In order to achieve this consistent language has been used even though this may not reflect the practice in all disciplines.

The NEC form set out to adopt ordinary language, with a view to making the contract form accessible to all users of it, including those who do not necessarily have English as a first language. To some extent, it succeeded in this goal. However, the authors chose to use the present tense, with the result that some of the provisions make somewhat peculiar reading which has led to some confusion.

In their fundamental review of the strategies, one of the objectives that the authors considered important was to minimise the incidence of disputes. They identify the use of

words like "fair, reasonable" and "opinion" were the potential cause of dispute. This is an interesting observation, given that in the course of negotiations one of the first resort of parties is often to insert language of this sort into the contract being negotiated. These words were generally replaced by a positive obligation often falling on the Project Manager (the contract administrator under the NEC Form) to decide or determine a matter. Reasons for such decision or determination were to be required and often the types of reason to be advanced are circumscribed by the NEC Form. The authors perceived that the resulting certainty was in the interests of the project, recognising that such decision or determination may be subject to subsequent review. The practical effect of this is to force the contract administrator to pro-actively manage the project. Project sponsors who adopt the NEC Form must therefore resource the project administrator adequately to allow him to discharge all his responsibilities under the form. There are at least anecdotal evidence of projects which had got into considerable difficulty where the project administrator has been inadequately resourced to discharge these obligations.

A key element of the NEC is the use of notices to manage the construction process. The obligation lies both on the contractor and the sponsor to deliver notices in specified circumstances.

Collaborative Contracts

With a view to addressing the conflicting commercial objectives which are perceived to exist when adopting traditional forms of contract, we have seen a willingness of project sponsors to innovate by working to align interests. These initiatives can take a variety of different forms, for the present purpose I would highlight the concept of project partnering and alliancing.

Simply put, project partnering is a concept which involves the stakeholders in a project undertaking a programme designed to develop a collaborative approach. The concept was a child of in the early 1990s and excited much interest. There was a revival of interest towards the end of that decade, but as a concept it is less currently frequently spoken of, although used more in practice. In the Report of the Construction Industry Review Committee, Construct for Excellence,[14] the authors "advocate the wider adoption of a partnering arrangement in local construction so that all project participants will work as a team to achieve shared project objectives rather than in competition with one other (sic)". The authors continue to state "for partnering to work, the interests, needs, expectations, constraints and risks of every stakeholder must be given fair consideration".

Like relationships between people, partnering comes with different degrees of commitment.[15] The Construction Industry Review Committee identified two broad types:

(1) Strategic Partnering

This was identified to refer to a long term relationship between a project sponsor and contractor covering more than a single project. Under such an approach the client will allocate to a contractor or small number of preferred contractors successive projects. Competition is maintained either by the existence of a group of preferred service providers, or by benchmarking the contractors against targets and periodic review of the list of preferred suppliers. By adopting such an approach the project sponsor and contractor have a shared objective of improving project performance and delivery, including investing time and resource in getting to know each other better. This approach is sometimes referred to as alliancing. The structure of such a relationship will reflect the individual contract and may contain elements of a facilities management type contract, in respect of the establishment of key performance benchmarks.

The U.S. Construction Industry Task Force identified the following benefits of strategic partnering :

(i) improved ability to respond to changing business conditions;

(ii) improved quality and safety;

(iii) reduced costs and project time and improved profit and value; and

(iv) more effective use of resources.

(2) Project Partnering

This approach involves the project sponsor and contractor

in partnering for the duration of a single project. This may be on the basis of a one-off competitive tender, or may be part of a continuing relationship between the project sponsor and contractor. This harnesses common interests for the duration of the particular contract with a view to improving delivery on the specific contract. It may lead to or be part of a strategic partnering initiative or a less formal long term relationship.

In preparing its report the Construction Industry Review Committee undertook a number of international visits. They concluded that experience in Australia, the United Kingdom and elsewhere demonstrates that the partnering approach to construction enables the participants to work together as a team. They recorded that the following positive outcomes to project partnering had been observed :

(i) reduced costs to increase productivity;

(ii) an increased focus on the needs and objectives of the consumer, which translates into consumer satisfaction;

(iii) improved quality; and

(iv) prompt response and potentially more innovative solutions when problems do arise.

The authors of the Review, however, continued to strike a note of caution, reporting that partnering is not a panacea for curing all the problems that may arise. However, they concluded that they saw "merit in the wider adoption of a partnership approach, alongside other good practices recommended in this report, in local construction to bring about the performance breakthroughs across the industry".

In other jurisdictions much has been written about the benefits of partnering, it is suggested partnering can help achieve

(i) Better design both in terms of ultimate completed product and buildability, due to the earlier involvement of the contractor or its sub-contractor in the design process.

(ii) Enhance site management and project co-ordination, resulting in improvements in project execution and purchasing.

(iii) The fostering of an environment in which the construction team is encouraged to work together rather than apart.

(iv) An increased potential for the project sponsor and contractors to develop more effective mechanisms for future projects, harnessing a desire for continued improvement.

(v) Reduce risk and uncertainties for both the project sponsor and the contractors.

(3) Partnering and Structural Change

Partnering is seen as one of the means of achieving the structural change sought to reduce adversarial behaviour in the construction industry. As noted above it was seen as one of the ways of achieving the performance breakthroughs sought by the Construction Industry Review Committee.

Sir Michael Latham, in "Constructing the Team", included the following recommendations with a view to achieving structural change :

(i) A specific duty for all parties to deal fairly with each other, and with their sub-contractors, specialists and suppliers, in an atmosphere of mutual co-operation;

(ii) Firm duties of teamwork, with shared financial motivation to pursue those objectives;

(iii) A wholly inter-related contract package with clear definitions of each party's role and duties;

(iv) A choice of allocation of risks appropriate to each project according to the party best able to manage each risk;

(v) Provision for changes to be priced in advance and independently assessed if agreement cannot be reached;

(vi) Flexibility as to payment structures with a clear provision as to when payment will be made;

(vii)Encouragement of incentives for exceptional performance and provisions for the possibility of early payment, including as to design development and off site fabrication;

(viii) Mechanisms to avoid conflict and achieve speedy dispute resolution.

As we consider further Project Partnering, it is worth keeping these goals in mind to see the extent to which the different approaches to partnering are perceived to achieve these goals.

A number of different approaches have been adopted to Project Partnering. The most widely adopted is to prepare

a standard form of contract, in Hong Kong this is usually a HKIA or FIDIC based form, and to provide a partnering arrangement ancillary to this agreement. The second is to abandon the "traditional" approach and to permit the relationship to be governed by the partnering arrangement [16]. The third is to seek to write the partnering arrangement into a contract based on a standard form[17].

One question which has not been adequately answered, is what are the implications where parties deviated from the formal contractual requirements and by consensus arising in the partnering meeting. No doubt, such an issue would need to be analysed against the background of the relevant facts and formal contract arrangements. In principle, there is no reason why an understanding or agreement reached in the context of a partnering meeting could not amount to an agreement to vary or override the pre-existing contractual obligations. However, this outcome is very often precluded as a result of contractual provisions. For example, the project sponsor may not be present at the partnering workshop and therefore not directly bound by any agreements reached in this context. At the same time, it is frequently the case that contracts provide that the contract administrator is not in a position to vary the contractual undertakings. If this comparatively simple approach does not operate to give effect to the outcome of the partnering discussions, resort may be had to more legalistic arguments such as waiver and/or estoppel. The difficulty with the parties placing their trust in such mechanisms is that they are technical in nature and thus open to uncertainty or debate. However, the fact that such arguments have not been extensively explored by the courts is, I suspect, a sign of success for partnering. It probably means that the kinds of issues addressed and resolved involve day to day construction problems rather than project critical issues. It perhaps also indicates a willingness of parties to honour understandings reached in this context.

Construction Management

The concept of construction management has recently gained considerable profile in Hong Kong, as a result of the successful adoption in projects in Macau. It is particularly well suited to circumstances where the project sponsor's design is incomplete at the time that the contracts for the projects are let. However, given that the scope of the work to be undertaken under the contract can be uncertain, the level of responsibility placed on the contracting enterprise can be limited.

It has been described as a relatively recent development in the construction industry reflecting the reluctance of major contractors to undertake all the risks inherent in the standard main contract. As a concept, it can be described as a method of procurement whereby the construction manager manages the construction of the project without accepting the principle risks of time and cost, which remain with the project sponsor. Thus it is the obligation of a construction manager to plan, programme and organise the project and the trade contractors who actually carry out the work, so that the project sponsor risks in relation to time and money are minimised. The advantage to the project sponsor of this form of procurement is that the responsibility for the construction can be handed to professionals who can manage the risks and the work can be started before the whole design is complete. The disadvantage from the project sponsor's point of view is that he contracts directly with many trade contractors and retains the risk as to time and cost. From a construction manager's point of view, these risks are borne by the project sponsor and the construction manager simply receives his agreed fee for managing the construction of the job[18].

At the outset it should be noted that there are no standard forms of construction management contract. This means that any contract that it is let using this methodology, requires extensive adaptation to one of the standard forms of the contract to all the preparation of a bespoke form. Either of these approaches is likely to increase the complexity and cost of initially letting the project. However, in light of the risk retained by the project sponsor, it may be possible to allow the contract to be let at an earlier stage in the design process than might be considered

prudent adopting other forms of contract.

Some of the difficulties with the approach are illustrated by the facts of Great Eastern Hotel Company Limited v John Laing Construction Limited. Here the project sponsor wished to undertake the redevelopment of a hotel situate in the heart of London. The project involved the complete refurbishment and extension of the existing building, taking an almost derelict hotel and turning it into a first class business hotel. The project involved demolition of parts of the existing structure and extensive re-modelling. The project was let before it had been completely designed. Unfortunately, during the course of construction a number of difficulties were encountered. These resulted in a significant cost overrun. The ultimate cost was approximately twice the original budget and was delayed by almost one year. The case considered responsibility for the delays and cost overruns. The starting point from the construction manager's perspective was that they were not liable.

As I have noted the contract was not in a standard form, but was a bespoke one. This means that care must be taken when seeking to draw general conclusions from the case, because the findings turn upon the specific language of the relevant contract.

At the heart of the contract was a provision by which the construction manager undertook to "carry out and complete the services fully and faithfully and in the best interests of the client and in accordance with the terms and conditions of the agreement". They also undertook to proceed regularly and diligently with their services and to exercise all the reasonable skill, care and diligence to be expected of a properly qualified and competent construction manager, experienced in carrying out services for a project of a similar size, scope and complexity to the project. In respect of the trade contractors they undertook to procure that each complied with its obligations. A provision of this sort is required to permit the project sponsor to procure the benefit of the trade contractor's undertakings as to performance.

The project sponsor argued that the network of contractual obligations imposed under the construction management imposed onerous duties on the construction manager. He relied heavily on the references to "ensure" in arguing that this amounted to an absolute obligation to achieve regular and diligent progress and the completion by the due date[19].

By contrast the construction manager pointed to the limited powers which the construction manager had to control the contribution of the works contractors, arguing that the obligations of the construction manager could be no more than that to exercise reasonable skill and care and due diligence in the execution of its powers under the trade contracts. The Judge rejected the strict interpretation argued for on behalf of the project sponsor, accepting that the construction manager's responsibility was confined to the use of reasonable skill and care and due diligence in the deployment of the powers provided under the relevant contracts.

Having made this general determination as to the level of the standard which was to be applied to the conduct of the construction manager, the Learned Judge then proceeded to apply this test to the facts [20]. He concluded that a number of the delays might be placed at the construction manager's feet, these included delay in the award of contracts and delay caused by the approach taken to design of an element of the works. With regard to the design point, the trade contractor had adopted a sequential approach. The construction manager was criticised for not having realised sufficient soon that this approach would inevitably result in delay. This was considered to be a breach of their obligations in respect of the management, administration planning and co-ordination of the work of trade contractors.

The judge observed that although the trade contract is at the risk of the project sponsor, the construction manager was not in the clear. There was a responsibility on the construction manager in selecting the trade contractors, developing the scope of their packages and the exercise of the controls given to the construction manager to minimise the risk to the project sponsor. For

example if, in negotiating a trade contract, the construction manager failed to secure a mechanism which would protect the project sponsor or had selected an inappropriate trade contractor, it would make him more vulnerable to an allegation that he had breached the construction management contract.

One of the areas in which the performance of the construction manager came under criticism was the management of information. It was noted that the construction manager was the centre of the information hub for the project. It was also observed that one of the prime reasons that a project sponsor may decide to incur the expense of appointing a construction manager is to manage any delays and variations that might arise on the project, in order to minimise their effect. Consequently, a competent construction manager would obtain information regarding the exact status of the project on a regular basis, to keep the project sponsor informed of the position, in order that he could manage and mitigate the consequences.

With regard to the scope of the trade contract packages, the judge determined that the identification of the scope of the packages was the responsibility of the construction manager. It was recognised that others may have the initial responsibility to design and provide the content, but he considered the ultimate obligation to make sure that the trade packages were workable and complete was that of the construction manager. This was part of its responsibility in safeguarding the interests of the project sponsor. It was therefore open to him to split packages or redefine their boundaries. The construction manager was found to have failed in the scoping obligations, with the results that increased sums had to be paid to trade contractors to carry out works by way of variation, rather than having them included in the original trade package.

The role of Engineers

What then does this mean for engineers? The polarisation of risk allocation techniques being used in the industry at the present time, does in my opinion present a particular difficulty professional engineer. The engineer is faced with the difficulty of satisfying a number of different masters, with radically different interests and views depending upon the role being performed.

The difficulties can be illustrated by a project to construct, say a new stadium. Under a traditional design brief, an engineer knows that his client is the operator. He knows that he must understand the requirements of the operator and reflect those in his design. He appreciates that the operator will be interested in the cost of the design but that his priorities may well lie in ensuring smooth operation and low full life cost. Consequently his operator client may be willing to accept a reasonably conservative design. Contrast this with the position where his client is a design and build engineering company. The engineer's initial involvement may be in preparing a tender design. At this stage a great deal of uncertainty may exist as to the project sponsors requirements, in addition there will be uncertainty as to whether the team in which the engineer is participating will be successful in winning the job. The initial dilemma will therefore be how much effort should be put into the tender process, too little and the opportunity may be lost. Once the project is won, the development of the design may involve further input from the project sponsor, but an engineer who is used to addressing the wishes of the project sponsor must stop and think about the interests of its client, the engineering company. The engineering company will be interested in cost effective construction and delivery of its contractual obligations, rather than necessarily meeting the possibly changing requirements of the project sponsor.

This position becomes yet more complicated in circumstances where a project sponsor engages an engineer to commence a design but then seeks to novate or other transfer the obligation to complete and construct the design to the engineering company.

For the individual engineer the challenge may be

recognising the different alignment of interests on each project, depending on the role being performed and the potentially different philosophies to risk allocation (and hence contract management) taken from project to project.

Conclusion

In light of the reduced opportunities available for construction enterprises in the domestic Hong Kong market, our industry has increasingly put its skills to work elsewhere within the region and, indeed, further afield. The gradual increased access to market opportunities in mainland China as well as the continued boom in the Middle East continue to provide opportunity for Hong Kong to put its world-class expertise to work. I suspect that we will see a growing trend for our experienced construction professionals to undertake works in other jurisdictions. At the same time, I suspect that we will continue to see the polarisation between philosophies in risk allocation. These will call upon the engineering profession to adapt in recognising the changing environment in which it operates and the changing demands in expectations of its clients in the particular context.

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1 I emphasise the "formal" mechanism. Contracts are frequently a hard edged mechanism. Whilst it is wrong to play down their significance, they are best seen as part of a range of tools to manage the challenges of project delivery, with softer mechanism also playing a key role.

2 Abrahamson, Risk Management, 2 ICLR 241, 1984.

3 Many examples can be found in the Construction Law Journal and the International Construction Law Review. Examples can be found at (2007) 23 Const. L.J. 23.

4 Published in September 1998.

5 The approach varies from project to project, in some cases an element of sharing of the user risk occurs.

6 These include development of a sports stadium and student accommodation.

7 For example, The Silver Book : An Unfortunate Shift from FIDIC's Tradition of being Evenhanded and of Focusing on the Best Interests of the Project (2000) ICLR 477.

8 Notably the World Bank, the European Bank of Reconstruction and Development and the Asian Development Bank.

9 This starting point was adopted with the permission of FIDIC.

10 For a fuller discussion of the content of the MDB Harmonised Edition see the paper of Peter Scott Caldwell delivered to the Society of Construction Law Hong Kong on 12 October 2005 in which the author compares the form the HK Government's Standard Form for Civil Works.

11 There are many examples of the kinds of risks which might under a standard form be carried by the project sponsor, which are now more commonly contractor risk items or shared risks. The occurrence of adverse weather conditions is one example of this.

12 Formerly the New Engineering Contract.

13 In particular, it provides options to deal with the situation where the contractor has full design responsibility. Some design responsibility or no design responsibility and options to address competitive tendering, target cost, cost reimbursable and management contracts.

14 Perhaps better known as the "Tang Report" at page 6.

15 There is a danger that in defining or identifying types of partnering some of the flexibility of the model is lost. However, at the same time a starting point for discussion is required. We do not intend the terms used to be terms of art.

16 See ACE's Standard Form of Partnering Contract PPC 200 and The Be Collaborative Contract www.beonline.co.uk

17 An example of this is Option X12 under the NEC Form.

18 Great Eastern Hotel Company Ltd v John Liang Construction Ltd (2005) 99 Con LR 45.

19 At first blush the employer's argument appears an extreme one, however in one of the few previous decisions relating to construction management John Mowlem & Co v Eagle Star and Others (1995) CILL 1047 a similar argument had succeeded. In this particular case the contract in question referred to the construction manager "securing" and "ensuring" performance. The judge accepted that these words should be given their ordinary and plain meaning - a conclusion which was conceded on appeal.

20 Counsel for the construction manager had argued that the John Mowlem decision should be distinguished on the ground that it related to a contract for the provision of a complete project rather than the provision of services. In his judgment the Judge does not explain why he did not follow the decision. However, he did emphasise that his view was reached following a consideration of the totality of the contract.