

**ADDRESS TO THE UNIVERSITY OF MELBOURNE  
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**CONSTRUCTION LAW & ALLIANCING**

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I note you have already discussed Traditional Contracts and Design/Construction Contracts in your course. You probably have also noted that the process of construction is quite complex involving many parties who are often dependent on each other for the success of a project. Alliancing spreads that risk and responsibility.

Alliancing is fundamentally different to Design and Construct in that where Design and Construct is totally reliant on the performance of one contractor (and his balance sheet) Alliancing spreads that risk.

From a perceived risk point of view why then would anyone move away from lump sum or Design Construct Contracts? During the course of this discussion I will outline a number of reasons why one might, but first the role of the client in the process is critical.

**CLIENTS AND THEIR ROLE**

Assuming competent contractors can respond adequately, there are two critical components for strong construction performance from a client's perspective.

They are :

- a) an informed client; and
- b) an adequate brief.

It is worth spending a little time on both these aspects before moving on to the Alliance Process.

Construction procurement is often complex, inherently risky, and requires specific skills and expertise to optimise outcomes. Clients have specific responsibilities when engaging with the Construction Industry. Owner/sponsor obligations include meeting service delivery needs, managing the scope of work and the relationship with those engaged to develop and deliver the project. It also includes identifying and managing the risks, monitoring and measuring the performance of the contracted parties, managing the transition from the planning role to the contracting role and maintaining responsibility for any changes to the scope of work and the impact on time and cost as well as stakeholders and project outcomes. It takes a person or group skilled in the above areas to be an “informed” client.

Generally, informed clients are a rarity in Australia, so it is no surprise that the Construction Industry suffers from a paucity in this area. The legal profession in order to overcome client deficiencies often attempt to locate too much risk and responsibility on contractors without necessarily understanding the implications of this risk allocation, and usually, without ensuring their clients are aware of or know the issues involved with construction.

Poor or inadequate briefing usually results from inexperienced people being asked to undertake, what looks on face value to be a simple task. As noted earlier, in fact most Construction Industry jobs are complex and involve many opportunities for abuse of the process unless there is a clear and unambiguous brief. In order to be able to provide “adequate briefing” the client needs to:

- ◆ develop and outline the project definition and scope;

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- ◆ establish realistic project budgets and program timelines;
  - ◆ assess and understand the risks and who is to manage which risks;
  - ◆ understand probity, ethical conduct and fairness, accountability, and adopt these standards throughout the project from initiation to completion;
  - ◆ understand the obligations for inviting tenders (ie prices, bids, quotations, and expressions of interest);
  - ◆ establish evaluation criteria for consultant and contractor selection;
  - ◆ understand the principles and application of project management;
  - ◆ have quality systems and procedures in place; and
  - ◆ have monitoring, performance measurement and reporting mechanisms in place.

## **THE ALLIANCE CONTRACT**

Once the client has addressed the briefing process the question of the form of contract arises.

To illustrate relationship or Alliance Contracting it will be useful to review an actual contract example - the National Museum.

In order to best explain the issues some background on the National Museum Contract will be useful.

The National Museum was a \$151Million project involving the Commonwealth and Territory Governments and is located on the Acton Peninsula in Canberra.

The Contract involved was an Alliance Contract – the highest order of Relationship Contracting – suitable for this project which is large, complex and time and cost driven, i.e. what might be regarded as a “nightmare” for most contracting parties.

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The project originated with an International Design Competition which my firm Robert Peck von Hartel Trethowan together with Ashton Raggatt McDougall won in 1997.

It was then decided to “go the Alliance route” in early 1998.

I will repeat a number of times through this talk that there is no perfect delivery system, however, in the Museum’s case the following conditions prevailed which led us down the Alliance route :

- 1) The opening date, 12 March 2001 was fixed.
- 2) The total budget \$151Million, allocated from Heritage Fund was fixed.
- 3) The client body, the National Museum Council, had developed an extremely limited brief and had no corporate museum exhibition experience, although some Council members were well informed, and no construction experience.
- 4) Significant elements of the public were opposed to the concept and/or location of the project.
- 5) The Senate Public Works Committee was structured in such a way as to publicly and seriously question all aspects of the project.

Circumstances clients often find themselves in.

How then does the Museum Project Delivery System :

- A) compare to a traditional lump sum or design construct contract – what are the benefits in going down the Alliance route;
- B) address the client briefing, risk taking, and probity issues;

Taking each in order :

## A) Lump Sum Price Based vs Alliance

For a project of significant size and complexity, there are perhaps only seven major “Balance Sheet” contractors available in Australia. By that I mean contractors of a size and financial muscle that could reasonably be expected to be there at the end of the project and to complete on time and on budget.

To this end there would be no difference in approach in shortlisting contractors for lump sum or Alliance projects. In this instance we shortlisted four – based on presented skills, team, experience, resources (personal and financial) and other factors as well as a requirement to bring to the process their major sub-contractors (i.e. electrical, mechanical, etc.) as equal partners.

The real variation from lump sum contracting then occurred :

Whilst an order of \$ size was known, the shortlisting did not involve any price consideration. KPMG were engaged as probity auditor to vet the shortlisting process and to observe and, if necessary, redirect the Government and Architectural teams involved in reducing the shortlisted four to a preferred single contractor – without reference to construction price. This took place over three two day sessions with the final shortlisted teams.

A two day Risk Reward Workshop was held with the preferred team, again without reference to final price.

The drivers were simply the “*Business as Usual*” profits and overheads of the three additional contracting parties and what, therefore, would be reasonable for them to achieve on the Museum. We were given all their financials, which were subsequently audited and confirmed by KPMG.

Once the “*Business as Usual*” figures were agreed they became a benchmark to assess under or over performance . Performance measures for the Museum were agreed as :

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- Time
  - Cost
  - Quality [which has 6 weighted-up criteria]
  - Design Integrity and I will come back to the details of these measures later [Appendix A].

The latter two being the key variant from typical Design/Construct contract penalties for under-performance by private sector participants, including the architects, ranged up to and including the loss of all profits and overheads.

Gains (except on time which was fixed) were available to the participants up to similar financial amounts only if the performance standards were exceeded by the Alliance team members (the ALT).

How, one asks, can Governments or clients agree to gainshare payments like those described above?

The simple answer is that they are assessed by independent panels who provide advice to the ALT, and at maximum equate approximately to the downside or pain-share costs to the private sector Alliance partners. I will come back to the nature and duties of these Panels later.

After the Alliance Team was appointed, it then set about confirming the budget estimates for the project which had been prepared with the Architects after we had completed the Design Development stage of the project. These estimates were to be called "*Business as Usual Estimates*" but were subsequently renamed to "*Total Outturn Estimates*" for the reason described below.

The process was intense and involved. Severe questioning of the Brief, as it had by then been developed (who this? why that?) as well as the proposed building techniques took place. During the process some 12% of estimated

building cost was cut from the estimates through innovative and better construction methods and techniques without any loss of design quality. The process involved all the parties and the aim was simply to do it better and for less. Some client driven scope changes were added to the budget at this stage so that the Alliance process itself was effective in assisting the client to deliver an appropriate Brief which reflected the combined skills of the project team – **BEFORE ANY CONSTRUCTION COMMENCED AND BEFORE ANY SIGNIFICANT FINANCIAL COSTS WERE INCURRED.**

In developing the estimate it became clear to all the ALT members the figures we were talking about were not “tender prices” but were final 12 March 2001 figures, i.e. prices which accommodated all likely changes, including inflation through to the completion date and thus the B.A.U. terminology changed to Total Outturn Costs. Those people in this room familiar with the normal tender process would recognise the significant change in attitude on this project compared to those, which operate in the Building Industry normally. As well as this “price” attitude change of the team, the other significant attitude change for them was in “innovation” and “doing it right **and once**”. Unquestionably for a project of this size and complexity the Alliance approach proved beneficial.

To achieve alignment in culture and approach with the team use was made of external facilitators. The facilitator was used by the team throughout construction to regularly review “attitude and best for project” alignment.

Two other differentiating factors worthy of note are :

### **Scope of Work**

The work under this Alliance Agreement included all design, manufacture, fabrication, supply, construction, erection, installation, testing, commissioning and defects rectification for :

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- ◆ the building, structural, mechanical, exhibition and landscape design;
  - ◆ construction of the National Museum of Australia a separate Australian Institute of Aboriginal Studies, services, fitout and external works; and
  - ◆ the fabrication and construction of the exhibition fitout including the broadcast space and theatres;
  - ◆ relocation of end users to the Project.

### **Commitments**

The Alliance contracted its members as follows :

- ◆ The Alliance Participants associated themselves in an innovative manner so as to produce outstanding results in the successful execution of the work under the Alliance Agreement.
- ◆ The Alliance Participants commit to establishing and maintaining an environment which encouraged honest, open and timely sharing of information and a willingness and desire to consider and implement new ideas in order to create a mutual winning position for the Alliance Participants.
- ◆ The Alliance Participants further committed to sharing and transferring such behavioural aspects to all persons associated with the work under the Alliance Agreement in order to achieve maximum success in all respects.



- ◆ The Alliance Participants acknowledged that a key purpose of the alliance was to avoid disputation and litigation, and commit to notify each other of perceived or real differences of opinion or conflicts of interest immediately they arose and to strive to resolve such differences or conflicts without any form of claims or litigious action. Such differences or conflicts were to be raised and dealt with at the first ALT meeting held after they arose.
  
- ◆ The Alliance Participants undertook to act reasonably and to do all things properly and reasonably within their power which were necessary to give effect to the spirit and intent of the Alliance Agreement and to give due regard to the representations of the other parties when reaching any decisions, including decisions as to the giving or withholding of consent or approval, or when exercising any other discretion pursuant to this Alliance Agreement.

## **B) Risk and Probity Issues**

Every step described above was witnessed, recorded and approved by an external auditor. In this instance the auditor was very familiar with the type and nature of an aggressive Senate Committee and the resulting breaches of “Commercial in Confidence” material.

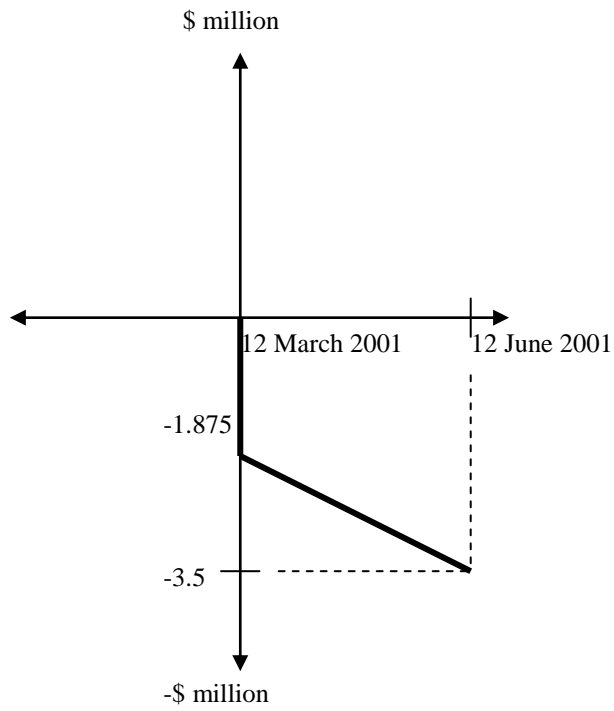
Returning now to the :

## **PERFORMANCE MEASURES**

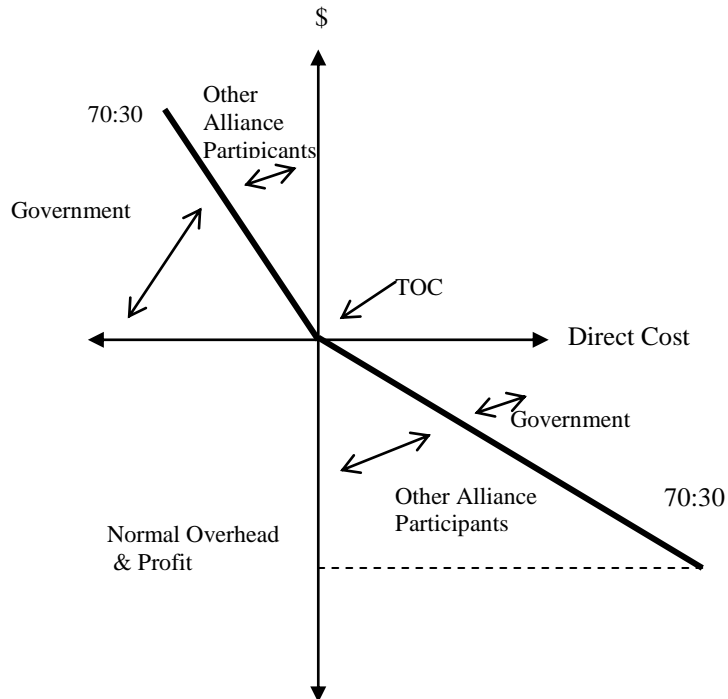
The Quality Sub Criteria measures are set out in Appendix A.

In terms of Time, in the Museum’s instance, as there was no motivation or need for the Government to occupy the building earlier than the scheduled date, the performance measure on Time simply was a penalty for late delivery.

**A) Time**



**B) Cost**



**A) Design Integrity**

If the Alliance failed to achieve the design integrity, no positive Post-TOC Gainshare was to be payable by the Commonwealth or the ACT and, further, the Alliance Participants were not be entitled to any of their Normal Profit.

ALT obtain the assistance of an independent panel to assist it in developing the methodology and measurement to determine whether or not the design integrity has been maintained or enhanced.

The Design Integrity Working Group (“the Working Group”) :

- ◆ established processes for measuring design integrity;
- ◆ undertook continuous monitoring and measurement of design integrity;  
and
- ◆ provides regular written reports on design integrity to the ALT.

The Alliance Participants agreed that it would be inappropriate for there to be any dispute or threat of litigation between the Acton Peninsula Alliance and any member of the Design Integrity Panel.

Accordingly the Alliance Participants agreed that the “no-dispute” and “no-blame” principles of this Alliance Agreement were extended to the discharge by the members of the Design Integrity Panel of their duties as members of the Design Integrity Panel.

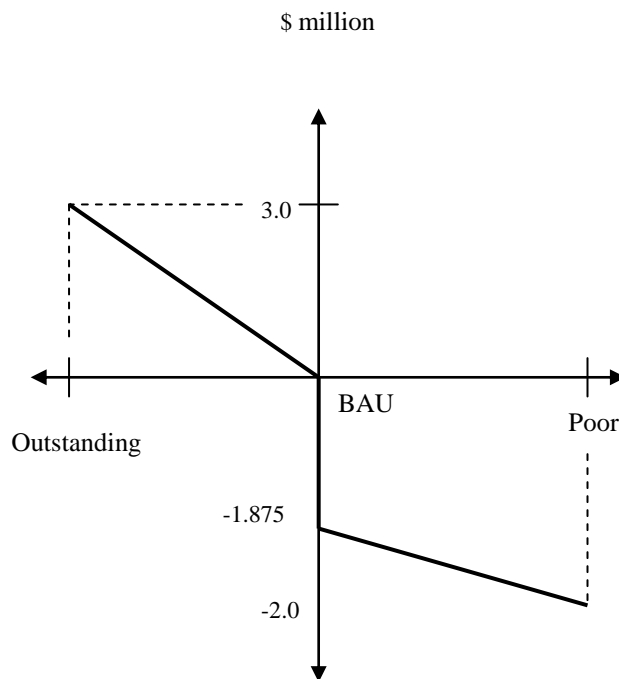
Failure by the members of the Design Integrity Panel to properly discharge their duties, arising out of or in connection with their capacity as members of the Design Integrity Panel, was not to give rise to any enforceable obligation at law or in equity in an Alliance Participant whatsoever save and except to the extent that the failure also constituted a Wilful Default.

## D) Quality Gainshare

To encourage the achievement of outstanding quality, the ALT members have agreed to a Gainshare on quality performance as shown in the following figure.

The Commonwealth created a quality pool of \$3.0 Million.

In order of priority, however, the Commonwealth drew on the Quality pool to make its contribution to any overrun on Direct Costs prior to making a payout on Quality Gainshare. The next priority was then to make payment to the other Alliance Participants of the Quality Gainshare.



Performance levels corresponding to “BAU”, “Outstanding” and “Poor”, together with the methodology for measurement were determined by ALT. ALT obtained the assistance of an independent panel chaired by Professor Keniger to verify the performance levels and management methodology.

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The Quality Panel provided :

- ◆ advice on the finalisation of the benchmarks, including any amendments to the benchmarks considered appropriate by ALT;
- ◆ verification of the procedure for measuring the criteria including audit procedures where appropriate;
- ◆ a final report to ALT recommending the final quality score (to be provided at the end of the maintenance period on 12 March, 2002); and
- ◆ ongoing advice throughout the Alliance on issues relating to quality to assist the Alliance obtain the highest possible quality score.

A similar protection to that provided for the Design Integrity Panel with respect to litigation was provided for the Quality Panel.

## CONCLUSIONS

### **What projects are suited to Alliance Contracts?**

Looking first at the traditional methods you heard about earlier in your course all major projects involve inherent risks. At the onset of the project these risks are “owned” and managed by the client. The traditional risk management strategy adopted by clients (principally through their solicitor) has been to transfer as much of this risk as possible to others. This approach is typically evidenced by lump sum schedule of rates and turnkey projects. Clients often try to transfer risks to designers and contractors that are more within the control of the client. However, this risk transfer strategy often fails, creating an adversarial climate, a high level of commercial disputation, time and cost overruns and overall poor performance.

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Poorly defined objectives, inadequate documentation, inadequate time and cost planning, unreasonable risk allocation and inadequate project staff can all contribute to the failure of traditional risk transfer strategies.

Faced with a risk transfer strategy, it is often not in the contractor's interest to be flexible. Rather, given the inherent adversarial nature of such relationships, it may be in the contractor's interest to allow a problem to unfold rather than to deal with it positively. At its worst, the contractor's interests may be best served by pursuing strategies aimed at increasing the overall cost to the client. At last, the contractor almost always demands an "innovation free" result from his service and contract suppliers.

Contracts can fail if clients inappropriately attempt to transfer all project risk to the contractor, or if the contractor seeks higher returns without accepting a greater proportion of risk.

### **When do you use an Alliance Contract?**

A fundamental rationale for a client electing to use a project alliance is that, in certain circumstances, the owner can manage its risks better by embracing them (rather than trying to transfer them) and then managing them within a flexible project delivery environment. This requires a clear understanding of the principles of risk management within a project environment. A properly informed client will be able to recognise whether the circumstances suit a risk transfer or a risk embrace approach – hence the Commonwealth's use of an Alliance for the Museum.

Projects which lend themselves most strongly to project alliances as opposed to risk transfer models are projects which exhibit one or more of the following features :

- ◆ a high degree of complexity, which cannot be fully scoped or specified at the beginning of the project;

- ◆ radical or rapidly changing technology;
- ◆ extremely tight time constraints which require flexibility of approach as they do not allow full scoping and specification prior to commencement of the work;
- ◆ the need to ensure that maximum “buildability” and construction, commissioning and operational expertise are incorporated into the design (in this regard, consider the ability to influence project cost in the early design stages, compared to the late stages of construction);
- ◆ the need for breakthroughs in design and construction to reduce the price to a level which makes the project viable;
- ◆ projects where the best expertise is spread across a number of companies, including the client’s organisation and there is a desire to freely tap into that expertise throughout the project.

Thank you for your attention, I will be pleased to answer any question.

*RWP/3111*



**APPENDIX A**  
**THE QUALITY SUB CRITERIA**

<b>MEASURES</b>			<b>COMPONENTS</b>	<b>WEIGHTINGS</b>	
1.	Buildings & Siteworks	1	• Quality of built finishes	18	30
		2	• Non-conformance	6	
		3	• Defects	6	
2.	Exhibitions	1	• Design Quality	9	30
		2	• Use of Content	9	
		3	• Integration of technology	3	
		4	• Accessibility	3	
		5	• Visitor Experience	6	
3.	Environment	1	• Environmental management	1	10
		2	• Waste management	2	
		3	• Water quality	2	
		4	• Air quality	1	
		5	• Energy efficiency LCC	3	
		6	• Ecologically sustainable development	1	
4.	Indigenous Employment Opportunities	1	• Enhancing opportunities in construction period	1.4	10
		2	• Enhancing opportunities beyond construction period	1.4	
		3	• Training	2.9	
		4	• Employment	2.9	
		5	• Supportive workplace	1.4	
5.	Public Relations	1	• Promoting the site	2	10
		2	• Industry recognition of alliancing	4	
		3	• Shareholder image	4	
6.	Safety	1	• Management processes	1.7	10
		2	• Safety outcome	5.0	
		3	• Individual intention	3.3	
				<b>100</b>	<b>100</b>