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## An International Perspective on Risk/Reward Contracting: Comparison of U.S., Middle East and U.K. Alliances

Susan Farrell, J. Ray McDermott, S.A.

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### Abstract

The purpose of the paper is to compare the structure of six contracts considered by clients and contractors to be partnering or alliance arrangements. Two are in the U.K., three in the U.S. and one in the Middle East. Particular emphasis is placed on the management structure and risk/reward elements found in the contracts.

Basic project characteristics such as total value, work scope and length of agreement highlight the impossibility of applying a simple checklist to identify a likely partnering candidate. Each client determines if its project is best served through a partnering arrangement with a risk/reward structure.

The management of the agreements has more similarities than differences, with four of the six projects being managed via Integrated Teams. While only two contracts studied are termed alliances, there nevertheless appears to be a trend to alliances by companies with some partnering experience.

The risk/reward structure of the six contracts shows a great deal of variability. The sharing of upside potential is most frequently on a 50/50 basis between the client and the contractor. However, as multiple contractors are introduced into an alliance, the percentage sharing changes. One alliance treats all contractors equally for reward sharing, while another rewards in relation to relative value in the contract.

The sharing of downside risk is highly dependent on the amount of perceived risk in the contract. One contract shows zero downside for the client, several share 50/50 with the contractors, while another places most of the downside risk on the client.

The offshore industry is still at an early stage of implementing partnering, alliancing and risk/reward

elements. One would expect an increasing number of alliances and more complex risk/reward structures as companies gain experience with the concepts.

### Introduction

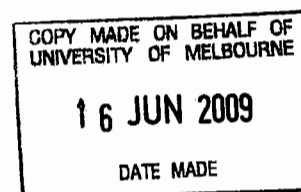
The words "partnering" and "alliances" have become as common in business parlance as "increasing shareholder value", "restructuring" and "downsizing". It is hard to disagree with the concept of saving money for both clients and contractors, but some basic questions often remain unanswered. What qualifies as a partnering arrangement? Does one manage a partnership differently? Why does the word "trust" come up with such frequency? How exactly does one implement the risk/reward portion of a partnering contract or an alliance?

The purpose of this paper is to compare the structure of six contracts considered by both clients and contractors to be partnering or alliance arrangements and which include a sharing of potential risks and rewards. The paper focuses on analyzing the management structure and the risk/reward elements to determine how contracts differ from one another. Two of the projects are sited in the U.K., three in the United States and one in the Middle East. All relate to marine construction and all are for major oil companies.

**Terms.** Evaluation of the six contracts and discussions with management revealed that each client had a clear, and usually strong, idea of what was to be considered a partnership, what was an alliance, and what should be in risk/reward. Unfortunately, there was little consistency. In fact, there were inconsistencies within the same oil company from one location to another.

Some clients insist that a true partnership must be a long term relationship. Some assume that a partnering arrangement is necessarily negotiated and not bid. Still others insist that partnering and alliancing must be managed by Integrated Management Teams. Each of these conditions exists in some agreements and not in others.

It was found that the terms currently being used with such fervor have very different meanings for different companies. All of the projects chosen for this paper are considered by the clients to be structured differently from conventional contracts and are called partnerships. Each contract includes risk/reward elements in which gains or losses are shared by more than one party. The term alliance is used in this paper to describe those projects in which the risk/reward structure forces the interdependence of multiple contractors with each other as well as with the client.



### The Contracts

Six risk/reward contracts have been chosen for comparison, with two being executed in the U.K., three in the U.S. and one in the Middle East. Table 1 summarizes their basic characteristics. As indicated, the two U.K. contracts are over £100 million in value and both were bid. Contract 1 is an onshore services partnership which will last for at least five years. Contract 2 is a large, integrated offshore contract which will continue for the life of the project only.

The North American contracts are smaller in value, but each is considered a key project by the client. Two were negotiated and one was bid; all three are for the life of the project. Contracts 3 and 4 are for the fabrication of multiple topsides and have an almost identical work scope. Both have been included in this analysis because Contract 4 incorporates changes to the risk/reward structure as a result of experience in Contract 3. Contract 5 is for an offshore pipeline installation.

The Middle Eastern contract (Contract 6) includes all fabrication and offshore work over a certain size and the partnership will continue for at least five years. The agreement was negotiated.

All of the contracts compared in this paper are for projects which were ongoing during 1995.

**Contract Characteristics.** Six contracts is too small a number from which to draw any general conclusions. Nevertheless, by assessing the projects' characteristics, we will try to identify the critical elements of partnering arrangements.

**Differences.** Three of the contracts were bid and three were negotiated. Two of the contracts were long term, being of five years or more, while four were for the project life only. Two of the contracts involved multiple contractors in an alliance, while four others kept separate relationships between client and contractor(s) or main contractor and subcontractors. Finally, three of the contracts were for multiple services integrated into one contract, while three were for single function tasks, such as topside fabrication or installation.

**Similarities.** The similarities of the contracts tend to be more qualitative in nature. The four contracts which ran for the project life are considered to be key projects by the clients because of their technology, short schedule or sheer investment size. They are not small, simple technology, standard work.

The two long term projects, lasting five years or more, have in common the belief by the client that an ongoing relationship with the contractor provides the structure to drive down costs in a way which would not be possible if the same work were completed by various parties over that time period.

**Qualifications for Partnership.** The similarities of the six projects lie mainly in the firm belief by the client that a partnership incorporating a risk/reward arrangement is the most cost effective method of carrying out a key project.

The differences among the contracts quite effectively highlight the inability to apply a simple checklist of characteristics to select a project for partnering. The values ranged from £10 million to over £100 million, some were bid and some negotiated, some clients set up alliances and some preferred to deal directly with multiple contractors.

### Management Structure

Although there may be disagreement in the industry over the semantics of partnering and alliancing, there is no doubt that management is the key to success. Each of the project managers involved emphasized and remphasized the need for commitment to the process, team building, and trust between the parties.

**Contract 1.** Contract 1 is a large, long term onshore services agreement which is managed by an Integrated client/contractor Team. Client personnel represent approximately 10% of the total project workforce, and are senior level management, youngish graduates in training or specialists in client systems. Although integrated, client personnel are dominant at the management level of this project. The Project Head is a client representative, and of his six direct reports, three are client, one is the client's partner and two are contractor personnel.

The Project Head reports to a Board comprised of three client and three contractor senior management representatives.

There is a close working relationship with related contractors, but they are not part of the Integrated Team.

**Contract 2.** Contract is a large, integrated offshore project operating as an alliance of six contractors plus the client. Bidders were required to agree to an alliance concept, but the details and structure were not formalized until after the awards.

The project is jointly headed by client and contractor Project Managers. Client and contractor staff are integrated, with seven of the top ten professionals being contractor and three being client.

Management is provided by an Alliance Management Team comprised of up to two representatives from each member, including the client. Each member of the alliance has one vote, regardless of its relative monetary weight in the project.

The Alliance Management Team reports to a Board of senior executives from the alliance partners.

**Contract 3.** Contract 3 is a single function (fabrication) project which is managed with joint client and contractor Project Heads. Reporting to the Project Heads are seven integrated teams. Of the top twenty-one people, ten are from the client, eight from the contractor and three are subcontractors.

The joint Project Heads report to a Steering Team, similar to the Boards in Contracts 1 and 2. The Steering Team consists of senior executives from the client, the client's partner and the contractor.

In Contract 3 there is no tie of risk/reward among contractors, although there are several key subcontractors on the project.

**Contract 4.** Contract 4 has almost the same work scope as Contract 3, and is using the same site team. However, Contract 4 introduced a risk/reward tie among contractors, thereby forming an alliance.

From a management perspective, there is no Alliance Team or Alliance Board as in the Contract 2 alliance. The Main Contractor continues to be the joint Project Head with the Client. The Steering Team contains senior management from the Main Contractor, Client and Client's partner, as in Contract 3.

**Contract 5.** Contract 5 is a single function offshore project and is managed via separate client and contractor teams. The teams work much more closely together than they have in previous projects executed with each other. The contractor's project planning was shared with the client, who was actively encouraged to participate. Both sides believe that the relationship has moved from adversarial to constructive.

Weekly meetings are held with the client, the main contractor and the subcontractors. Although the project teams are not integrated, the contractor's project manager spends several days a week in the client's offices and feels he is now treated more as an employee of the client.

**Contract 6.** Contract 6 is a long term, multi-function services contract which is also managed via separate client and contractor teams. Compared with previous projects executed between the same client and contractor, the client's team is significantly smaller than it had been prior to the partnering agreement. Instead of using a full inspection team as was the case prior to the partnership, for example, the client now audits the contractor's inspection records.

Client and contractor teams interact on a daily basis and have scheduled weekly meetings. Each considers the partnership to have produced a very close working relationship.

**Management Characteristics.** Does one manage a partnership or alliance differently from a more traditional contract? The response must assuredly be yes. Table 2 summarizes the management characteristics of the six contracts. More similarities than differences in management style exist, although there are still variations between companies

**Differences.** Two of the six projects have retained separate client and contractor teams, albeit working more closely together compared with their past history. It should be noted that the clients and contractors in the projects with separate teams are firmly committed to partnering, but have chosen a management structure other than an integrated approach.

Of the two projects which are called alliances, one has an integrated Alliance Team, while the other does not. In the latter case, the main contractor and client have an integrated team which has meetings with the smaller contractors.

**Similarities.** Four of the projects are managed via integrated client/contractor(s) teams. All four have a Board or Steering Team to which the team reports. The Boards are made up of senior executives from the client and contractor organizations.

The most pervasive management similarity among the projects, however, is the absolute conviction of both client and contractor personnel that cultural changes are necessary for the project management to be successful. The word "trust" is indeed mentioned by all sides in the context of smooth communications and quick resolution of the numerous problems which arise on any project. Trust refers to the commitment towards finding solutions before arranging payment terms, checking with lawyers or, especially, finalizing paperwork. All parties must share in the belief that an equitable settlement will be made once the issue is resolved.

Each project manager stressed that cultural change within organizations was difficult, but imperative to achieving effective management.

### **Risk/Reward Structure**

The risk/reward structure in the six contracts shows more variability than the management approach. The treatment of schedule versus productivity, the choice of what units to measure and the percent sharing between client and contractor all vary markedly from contract to contract.

**Contract 1.** Contract 1 has the most complex and comprehensive risk/reward structure of the contracts studied. It treats both schedule and productivity, although the two are not tied together. Being a five year arrangement, it has evolved over time and recently

introduced a case by case alliance in order to tie together two large contractors for specific tasks.

Contract 1 measures risk/reward in manhours expended. The profit element is defined as £x per chargeable hour, say £1 per hour for illustrative purposes. Of that £1 profit per hour, 70% is subject to meeting Milestone or Schedule targets, 20% is subject to Productivity targets and 10% to Quality targets.

Any of the three risk/reward elements can cause the base profit to be higher or lower than £1. If profit greater than £1 per hour is calculated, the "extra" profit will be shared 50/50 between client and contractor. If profit is calculated lower than the £1 per hour, the contractor is paid less, with no sharing of the loss by the client.

**Milestones.** The 70% milestone element is comprised of numerous individual milestones which are weighted to determine their portion of the whole. Milestones are agreed annually for long term projects, and at the beginning of each individual project as appropriate. Clear definition of the milestones is a time consuming process, but necessary to ensure that both parties are in agreement on what target is to be met. This milestone element is one of the few cases where a schedule element is integrated directly into the risk/reward structure.

**Productivity.** As with milestones, targets for manhours per task are set on an annual basis for ongoing work and at the beginning of any discrete, defined project. Productivity is calculated as Target/Actual, so a 1.10 productivity would be an improvement over target. Upside productivity improvement is shared equally between client and contractor.

If productivity is less than 1.00, then the £0.20 per hour attributable to productivity targets will decline along with the actual productivity. For example, a productivity of 0.80 would reduce the profit element of the £1 per hour from £0.20 to £0.16. If productivity drops below 0.60, the entire productivity profit element is lost to the contractor.

**Quality.** A quality program is agreed between client and contractor. 10% of the profit element is payable against successful completion of the program and clearing of any corrective items within a certain period.

**Special Tasks.** In addition to the risk/reward elements which run throughout the contract, the client has instituted a special tying of the contractor to another large contractor on an identified task basis. We have not termed Contract 1 an alliance because the special tasks are on a case by case basis only.

An estimate is made of the two contractors' manhours for Task A, for example. A Target is then set which improves on the Task by x%, say 2%. The Target will not be met unless the estimated manhours are lowered by 2%. The

contractors put aside 2% of total task revenue, which is considered at risk to achieving the new Target (Estimate less 2%).

If the Actual < Target (Estimate - 2%), the client shares half of the savings and the contractors receive the other half.

If Actual = Target, i.e. the productivity improvement represents exactly 2% fewer manhours than the original estimate, the contractors receive revenues (costs plus profits) projected in the estimate.

If Actual > Target (Estimate - 2%), the contractors may lose up to 2% of projected revenues.

Downside risk for the contractors is limited to 2% of revenues for the Task. The client bears the full risk of actual manhours being over target by more than 2%. For example, if the original manhour estimate is overrun by 5%, the contractors would cover the first 2%, but the client would then pay for the next 3% costs plus profits incurred.

Contract 1 illustrates how a special incentive scheme for identified tasks may be introduced into a long term partnering contract without disrupting the other risk/reward elements. In addition, meeting the Target requires an improvement over the original estimate.

Although both Schedule (Milestones) and Productivity are risk/reward elements, they are not tied together in any way.

**Contract 2.** Contract 2 is an alliance which sets total cost as its Target. Schedule is treated separately from cost.

Each member of the alliance is viewed as equally important in meeting the Target and every contractor's cost, including profit, is listed in the alliance agreement. Relative contractor values range from below 5% of the total, say £100 million, to above 25%. Nevertheless, risk/reward for all contractors in the alliance is tied to the total Target cost.

**Under Target.** If the Actual cost is less than Target, the savings will be shared 25% by the client and 75% will be distributed equally among the alliance partners.

Scope reductions which result in a gain to the alliance will not harm the contractor, as it will be paid the profit element of the work not performed.

**Over Target.** While under target costs are shared among the alliance partners, over target costs are the responsibility of individual contractors.

If a contractor is over target cost on his element, his downside will be limited to the profit on the first 10% of cost overrun. The client will absorb the actual cost of the work for the first 10% overrun, and will pay cost plus profit on overruns greater than 10%.

**Schedule.** The schedule element is tied to the date of first oil and amounts to a bonus if the target date is met. Details of the arrangement had not been finalized as of this writing, although the contract had been in force for some months.

Contract 2 represents a project with a large amount of perceived risk by client and contractors. Therefore, upside potential for the contractors is significantly greater than the downside risk. The alliance is also noteworthy in that it treats all partners as having an equal impact on Targets and rewards all equally.

**Contract 3.** Contract 3 is based on the client and the contractor sharing equally any cost savings or cost overruns. The risk/reward element is measured in manhours. There is no schedule element.

Agreed Target manhours were set for total fabrication, although the project contained multiple structures. This contract does not tie the contractors together in a risk/reward structure and is therefore not an alliance. However, the client had similar, but separate, risk/reward arrangements with each of the major subcontractors.

Although actual manhours are paid at the rates incurred by each discipline, the risk/reward element was calculated using an agreed representative manhour rate.

**Under Target.** If Actual < Target manhours, the client and the contractor share equally in the saved costs. The contractor is paid 50% of the saved manhours at a representative labor rate agreed in the contract. The contractor also gains the unexpended variable portion of a fixed fee payment.

**Over Target.** If Actual > Target manhours, the client and the contractor share equally in the overrun. The contractor is paid 50% of the extra manhours at the representative labor rate. The contractor also loses any overexpenditure of the variable portion of the fixed fee.

Contract 3 has an extremely simple risk/reward structure which was modified somewhat in Contract 4.

**Contract 4.** Contract 4 included several key changes to the risk/reward structure in Contract 3. Whereas Contract 3 included no schedule element, Contract 4 considered the schedule to be critical and tied to productivity. In addition, the major subcontractors, who in Contract 3 had separate risk/reward agreements with the client, were joined with the main contractor in Contractor 4 into an alliance agreement. The 50/50 sharing between client and contractor was replaced with a more complex risk/reward structure.

The risk/reward element of Contract 4 is measured in total alliance manhours. Because Contract 3 was not far enough along to have established productivities, the Target for Contract 4 was based on an x% improvement over the

original Contract 3 estimate or an x% improvement over the actual Contract 3 manhours, whichever was lower. Separate percent improvement targets were set by discipline, which is the same as by contractor. Productivity in this contract is measured as Actual/Target, so a .90 productivity is an improvement.

**Meet Schedule and Under Target.** If the schedule for all structures is met AND Actual < Target manhours, the value of the saved manhours at a representative rate is paid to the contractors in relation to their input value. In this case, the percentages were approximately 60% to the main contractor and 20% to each of the two major subcontractors in the alliance.

The client does not benefit directly from cost savings. However, the tying of the main contractor to the subcontractor creates an interdependence effect which should increase incentive to meet schedule and target manhours.

**Miss Schedule and Under Target.** If any structure does not meet its schedule, the entire schedule is considered missed.

If the schedule is missed, but Actual < Target manhours, the value of the saved manhours at the representative rate is paid 50% to the main contractor and saved 50% by the client.

The two main subcontractors in the alliance receive no savings benefit if the schedule is missed, even if they were not the cause.

**Over Target.** If Actual > Target manhours, the main contractor pays the subcontractors for actual manhours expended. The main contractor and the client split the total extra cost (manhours at the agreed rate) on a 50/50 basis.

The subcontractors bear no risk on manhour overruns.

Contract 4 has tied the key contractors together and introduced schedule as a critical element in the risk/reward structure. It also eliminated the variable portion of the fixed fee, with the entire fixed element becoming truly fixed.

The sharing of savings and overruns, however, differs markedly from Contract 3, which was based on a simple 50/50 concept. The structure of the risk/reward puts a burden on the main contractor to ensure the main subcontractors, now alliance partners, meet both schedule and target manhours.

**Contract 5.** Contract 5 is an offshore project and the risk/reward element is measured in days excluding mobilization and demobilization. The client shares 50/50 in any variance from Target up to so many days on either side. Above or below that number of days a sliding scale is

introduced which further enhances or penalized the contractor for very good or very poor performance.

There is no schedule element as part of the risk/reward structure.

**Under Target.** If Actual < Target by 1 to x days, representing a 13% improvement, the client cost is reduced by the cost of sales per day (direct cost plus support allocation) and the contractor retains the profit element plus other overheads per day. This was estimated to be approximately a 50/50 sharing between client and contractor.

If Actual < Target by x+1 to y days, up to a 30% improvement, the client cost is reduced by direct costs only for these days and the contractor retains all allocations plus the profit per day.

If Actual < Target by more than y days, i.e. more than a 30% improvement, the client cost is reduced by incremental costs per day for these days and the contractor keeps some operating costs plus allocations plus profit per day.

**Over Target.** If Actual > Target by 1 to x days, a 13% deterioration, the client pays the cost of sales per day (direct costs plus support allocation) and the contractor loses the profit per day plus other overhead allocations.

If Actual > Target by (x+1) to y days, up to a 30% deterioration, the client pays only the direct costs per day. The contractor loses the allocations plus the profit per day.

The client payment is capped at y days, representing a 30% deterioration from Target. The contractor pays all costs after y + 1 days.

In Contract 5, the client absorbs all weather downtime, as opposed to named storms only. Mechanical downtime is included in the target days and is part of the risk/reward element.

Subcontractors in the project are not included in the risk/reward structure.

**Contract 6.** Contract 6 is a long term agreement including all fabrication and offshore work over a certain size. Values expressed in £ per ton for fabrication elements are established in the contract.

**Fabrication.** If fewer manhours than estimated are expended, the contractor retains the full savings.

If manhours incurred are greater than estimate, the contractor bears the full cost.

In essence, the fabrication portion of the agreement functions as a traditional lump sum contract, with the

contractor bearing the full burden of either meeting or not meeting his original estimate.

**Offshore.** Offshore work is at day rates established in the partnering agreement. If work is performed in fewer days than anticipated, the client pays for fewer days. If weather increases the days, the client pays for weather. Therefore, the client bears all of the offshore variability, both upside and downside.

**Innovation.** The risk/reward element of this partnering agreement is limited to the savings for any "innovative" practice. The contract calls for the client and the contractor to split 50/50 the savings incurred from any agreed innovative concept.

In one example, the contractor proposed to perform an operation onshore which was usually carried out as part of the hookup activity. After reviewing the technical documentation, the client agreed to try the new method. If the practice were successful, the savings would be split 50/50 as per the agreement. If unsuccessful, the contractor would incur the direct costs necessary to fix the problem, while the client would contribute any materials needed.

Because of the imprecise nature of "innovative" practices, client and contractor must discuss in detail and agree what will be the consequences if the innovation is unsuccessful.

**Risk/Reward Characteristics.** A major thrust of this study was to explore how different companies have implemented the risk/reward portion of a partnering agreement. Table 3 summarizes the six contracts according to Measures, Inclusion of a Schedule Element, Method of Risk/Reward Sharing and Use of Alliances.

**Measures.** All risk/reward contracts attempt to measure the savings or shortfall from Target, which would then be split in some fashion among client and contractors. All three U.S. contracts measured the unit inputs against target, i.e., either fabrication manhours or barge days.

One of the U.K. contracts measured multiple elements (milestones, manhour productivity and quality), weighted them as to their importance. The second U.K. project simply measured the total cost estimate of the contractor against actual cost.

The Middle Eastern partnering agreement, which rewards innovative practices, measures the total £ saving generated from the new method. Because each case would be different, client and contractor would necessarily have to agree how to measure the impact each time as well.

**Schedule Element.** Only two of the six contracts reviewed include a schedule element as an item in the risk/reward calculation. It is interesting to note, however, that both of the contracts which did include schedule consider it critical. The U.K. five year agreement (Contract 1) weights the

Milestone activity as 70% of the profit element at risk, with the next highest weighting, Productivity, at only 20%.

The U.S. fabrication contract (Contract 4) which includes schedule did so only after the client had experience with a similar arrangement (Contract 3) which did not include schedule. In Contract 4, both schedule and target manhours must be met for maximum award to all contractors.

**Method of Risk/Reward Sharing.** By far the most common form of sharing upside potential in the six contracts is for the client and the contractor to split any savings 50/50. Contract 2, which included many contractors in an alliance, shared 25% to the client/75% split equally among the contractors. Contract 5 shared 50/50 to a certain point, then introduced a sliding scale for continued improvement. Contract 4 includes a different sharing scheme for subcontractors depending on whether schedule and target, or target only, are met.

The treatment of downside risk appears to be somewhat more variable among contracts and dependent upon the perceived amount of risk in the project.

The two U.K. projects vary greatly in risk, and in the accounting for downside sharing of that risk. The long term onshore services contract (Contract 1) has no downside risk for the client, with the contractor bearing 100% of cost overruns. Conversely, the large integrated offshore project (Contract 2) has almost all of the downside risk carried by the client, with the contractor losing only the profit on the first 10% of the overrun.

The three U.S. contracts (Contracts 3, 4 and 5) are based on the 50/50 principle for downside as well as upside. Contract 4 limits downside risk to the main contractor, as opposed to the smaller contractors in the alliance. Contract 5 introduces a sliding scale which caps client downside risk at a 30% deterioration. Contract 3 retains the 50/50 sharing principle with no downside cap.

The Middle Eastern long term agreement (Contract 6) downside reflects the possibility that an innovative practice would, in fact, end up making matters worse and those increased costs would have to be covered. Although each case would be agreed individually, the 50/50 concept appears to govern.

**Alliancing.** All of the contracts reviewed are large enough to include multiple contractors, yet not all of them include those contractors in the risk/reward element in the form of an alliance.

The U.K. contracts appear to be furthest along in implementing the alliancing concept. The long term onshore services project (Contract 1) has recently introduced an alliance with a second large contractor for special tasks. The intent is for the client to tie together two

of its largest, hitherto independent, contractors. The U.K. Contract 2 alliance assumes that each contractor has the ability to impact target cost and therefore all are treated equally, regardless of their relative weight in total project cost.

Only one of the three U.S. contracts is formed as an alliance. However, it is interesting to note that the Contract 4 alliance was structured after having had experience with no alliance in Contract 3.

The Middle East long term contract is not an alliance, and would be unlikely to be so with the risk/reward element based on unique, innovative practices.

### Conclusions

The purpose of this paper was to compare the structure of six contracts considered by clients and contractors to be partnering or alliancing arrangements, and in particular to focus on the management and risk/reward elements. Because the contracts were sited in the U.K., the U.S., and the Middle East there was some opportunity for international observations.

**Partnering Characteristics.** There is no checklist of characteristics which marks a project as a likely partnering candidate. The variability in the six agreements highlights the individual nature of offshore construction projects and the importance of how the project is perceived by the client.

In the U.K., both projects were bid, while two of the three projects in the U.S. were negotiated. The Middle Eastern partnership was also negotiated. The project managers for the negotiated agreements all argue that the reduction or elimination of bid costs and time is a major saving for all parties.

Although two of the agreements were for five years or more, the nature of offshore projects is reflected in that four of the six were for the life of the project only.

It is noteworthy that all of the six projects were for major oil companies, not smaller independents or national oil companies. It appears that from a global perspective the industry is still in the early stages of implementing the partnering concept.

**Management Structure.** The management structure of the agreements seems to lean heavily towards integrated teams. Four of the six agreements operate under an integrated structure. Of the two that do not, one U.S. and one Middle Eastern, the contractors' project managers state that they are treated like employees of the client.

A move towards alliances also seems to be indicated from this sample. Although the long term U.K. agreement is not a full alliance, it does include alliances for special tasks.



The second U.K. agreement has structured its alliance to make all contractors equal for the risk/reward element.

Only one of the four U.S. and Middle Eastern contracts is an alliance. However, that alliance was the result of the client's earlier experience working separately with key contractors. It was precisely the prior experience which led the client to form an alliance on the next, similar project.

One would conclude that the trend towards alliances would increase as experience with partnering increases.

**Risk/Reward Elements.** As evidenced in Table 3, there is a great deal of variability in the risk/reward structure of contracts. The agreements tend towards a 50/50 sharing of upside potential, with high variability in the sharing of downside risk.

In general, the U.K. agreements appear to be somewhat more complicated than those in the U.S. and Middle East. However, this may be a reflection of the more complex nature of the projects and of the greater experience with partnering in the U.K.

It is interesting to note that of the two U.S. projects carried out by the same client, the second partnering agreement was significantly more complicated than the first. Whereas the first was not an alliance, the second tied together the main contractor and key subcontractors. In the first contract, risk/reward was shared 50/50 for both upside and downside. The second contract introduced changing percentages for main contractor and key subcontractors depending on which targets were met.

The Middle Eastern agreement limits risk/reward to innovative practices only. Since the work is of a repetitive nature, the one time reward structure leaves open the issue of whether the contractor would continue with an innovative practice which will reduce his scope in the future.

**Concepts in Development.** Evaluation and comparison of the six partnering agreements leads to the conclusion that the concepts of partnering, alliancing and risk/reward are still in the early stages of development at many companies.

Clients are still determining what type of project is a likely candidate for partnering and whether the agreement should embrace an alliance. The decision appears to be very company specific.

From this small sample, the risk/reward structure appears to start simply, then become more refined, and complicated, with experience. There is not yet enough evidence to know if the structure will become over-complicated.

In sum, one would expect that the trend to partnering would increase, with more smaller and national companies

entering into this type of arrangement. As experience is gained, the frequency of alliances will also increase.

The risk/reward structure will always remain closely tied to the characteristics of an individual project. The apparent tendency to increase the complexity of the risk/reward elements will hopefully be balanced by the industry's global drive to simplify requirements.