



OTC 8091

Best Intentions: Lessons Learned on International Partnering and Alliance Contracts

Susan Farrell, Brown & Root Energy Services; Alastair Ramsay, McDermott Marine Construction, Ltd.;
Jerry Watzke, Tulane University

Copyright 1996, OFFSHORE TECHNOLOGY CONFERENCE

This paper was prepared for presentation at the Offshore Technology Conference held in Houston Texas, 3-6 May 1996.

This paper was selected for presentation by the OTC Program Committee following review of information contained in an abstract submitted by the author(s). Contents of the paper, as presented, have not been reviewed by the Offshore Technology and are subject to correction by the author(s). The material, as presented, does not necessarily reflect any position of the Offshore Technology Conference or its officers. Permission to copy is restricted to an abstract of not more than 300 words. Illustrations may not be copied. The abstract should contain conspicuous acknowledgment of where and by whom the paper was presented.

Abstract

Although the energy industry is still in the early stages of partnering and alliancing, there is enough accumulated experience to be worth sharing information on what has worked and what has not. This paper explores the lessons learned in six agreements in the U.K., the U.S., and the Middle East.

It concludes that not all projects are potential candidates for partnering or alliances. Those likely to be successful will contain common characteristics of complexity, uncertainty, technology and duration. Management structure is moving towards integrated teams, although projects currently fall along a broad spectrum before becoming truly integrated. The risk/reward structure is becoming more complex over time, although it is unclear that tinkering with percentage sharing schemes will actually change the behavior of project participants and result in additional cost savings.

The use of team building techniques and facilitators may well enhance the alliance implementation, but the choice of both company and individual members is fundamental to success. The overriding success factor, however, is the setting of fair and achievable targets.

All of the managers surveyed stated that their projects benefited from the use of a partnering or alliance structure. Three of the projects were far enough along to cite significant cost savings.

Although some in the industry are still doubtful that alliances can make a true difference to a project's outcome, those who have participated are convinced they have achieved results which would have been unattainable in a traditional structure. They would add, however, that partnering and alliancing is not easy, and not for all projects. The industry must share practical information if significant learning is to occur.

Introduction

The energy industry is still in the early stages of exploring the optimal implementation of partnering and alliance agreements. Although the concept of a closer, more efficient working relationship among clients, contractors and suppliers is quite compelling, the actual implementation of such agreements is proving to be difficult.

This paper will explore the details of lessons learned in six partnering/alliance agreements in the U.S., the U.K. and the Middle East. The research follows SPE 30376, presented in September 1995 at Offshore Europe:

An International Perspective of Risk/Reward Contracting: Comparison of U.S., Middle East and U.K. Alliances. Details of the agreements are referred to in Tables 1 and 2.

Many common issues arose as the project managers of these six projects reviewed the specific successes and failures of the partnering approach. We will address fundamental questions relating to how the agreement should be structured and managed. Is there a real difference between integrated client/contractor teams and simply working more closely with each other? Why do some teams succeed and others fail? Is it necessary to have an Executive Board/Steering Committee? Who should be in the Alliance and who remain outside?

The risk/reward structure is critical to the whole concept of partnering and alliancing. What elements should be included? Does it matter how percentages are shared? Did the risk/reward structure result in the behavior it was designed to elicit? What pitfalls were uncovered in this survey?

Finally, the issue of economics will be discussed. Do partnerships and alliances really produce savings which would not have been achieved in a traditional structure? What type of projects are the best candidates for success?

The following outline will be used:

- Terms
- Characteristics of the Agreements
- Partnering and Alliance Structures
- Successful Implementation
- Pitfalls
- Economics

Terms: Partnerships, Alliances and Contracts

The terms *partnering* and *alliancing* are in wide usage throughout the industry without having a common meaning. Indeed, we found controversy within organizations about what a partnership "should" be.

All of the projects discussed are considered to be partnerships or alliances by the clients and contractors concerned. All are large enough to have multiple contractors or vendors.

For the purposes of this paper we have defined *partnerships* and *alliances* as arrangements which include a structure to share reward and/or risk between a client and contractor(s). If the risk/reward relationship is between a client and a single contractor, it is called a *partnership*. If there is interlocking risk/reward among multiple contractors and the client, it is called an *alliance*.

Finally, we will use the term *contract* to refer to the standard legal document detailing terms, conditions, and liabilities and *agreement* to refer to the partnering and alliance arrangements.

Characteristics of the Agreements

Table 1 summarizes the basic characteristics of the partnering and alliance agreements reviewed. Two of the six projects are complete, two are toward the end of their five year lives and two are still ongoing. Including the planning phase, all of the projects had a duration of at least eighteen months, providing adequate time for the project participants to assess what worked well and what did not.

Table 2 summarizes the risk/reward structure of the agreements. It illustrates the different measures, such as total

cost, manhours, or barge days, used to set targets, as well as the various ways in which upside potential and downside risk were shared among clients and contractors.

Agreement 1. Agreement 1 is a long term engineering services project in the U.K. Having started as a partnership it evolved into an alliance for an increasing number of specific tasks defined by the client. The project team was entirely *integrated*, that is, contractor and client work directly for one another with the most qualified person filling each slot. The team reports to an Executive Board with client and contractor representatives.

The risk/reward measures include milestones, productivity and quality elements, with each being assigned a priority weighting. Upside potential is shared 50/50 between the client and the contractor. Downside risk is either borne entirely by the contractor or, in special tasks, capped at a maximum % loss to the contractor.

Agreement 2. A large, integrated offshore development in the U.K., this agreement has provided the opportunity to observe the functioning of an alliance group and a traditional group within the same project. The characteristics shown in Tables 1 and 2 relate to the alliance portion of the project only.

Agreement 2 defines total cost as the target measure and allocates upside potential 25% to the client. The remaining 75% is to be shared *equally* among the six contractors irrespective of their relative contribution to total project cost. If over target, costs would be attributed to the responsible alliance member, up to a maximum after which the client would incur the entire increase.

Agreements 3 and 4. Agreements 3 and 4 cover the U.S. fabrication of large modules. Both are for the same client with the first project having been bid and the second negotiated. Agreement 4, therefore, incorporated changes in structure resulting from lessons learned on Agreement 3. Whereas Agreement 3 was a partnership, Agreement 4 was turned into an alliance by introducing a risk/reward structure linking several contractors. Agreement 3 did not include a schedule element, but schedule was added in Agreement 4.

Agreement 5. This complex U.S. offshore installation project was over a year in the planning for a timeframe expected to last less than sixty days. The simple partnership between client and contractor had a sliding scale which shared risk and reward equally for the first x days over or under schedule. Increasing loss or benefit was then allocated to the contractor as days over or under increased. Agreement 5 incurred a freak accident before the installation started which immediately negated the schedule and moved the risk sharing to the bottom end of the scale.

Agreement 6. Agreement 6 is a five year services contract in the Middle East for all fabrication and offshore work above a certain size. It is a simple partnership between operator and client with the only risk/reward sharing being for approved innovative practices. Building on an existing long term relationship between companies, the changes in behavior under the partnership have nevertheless been notable and resulted in reduced costs.

The Partnering and Alliance Structures

The most critical element in determining the perceived success or failure of alliance and partnering is the individuals on the team and the active support of their management. On all of the projects reviewed, the managers continually emphasized that some individuals could not adapt to a close working relationship with another company, and ultimately those individuals had to be removed for the good of the project. The willingness, or lack of it, to change appeared to be spread evenly across clients and contractors, with both groups struggling to convince certain members in their organizations that alliancing and partnering was a step forward.

Having recognized the critical role of individuals, we can turn to the issue of the partnering and alliance structure. Some agreements clearly seemed to work better than others and to result in predictable and desired behavior on the part of their participants. In spite of the mix of projects, there was surprising agreement on what should and should not be repeated.

We will discuss the key elements of structure:

- Contract versus Alliance Agreement
- Use of Integrated Teams
- Effectiveness of Executive Boards
- Makeup of Alliance members
- Risk/Reward Structure

Contract versus Alliance Agreement. In almost every case, a standard legal contract detailing terms, conditions and liabilities was negotiated between parties prior to the partnering or alliance agreement being finalized. Discussions on the contract were carried out in a traditional, adversarial manner, normally by the respective contracts and legal departments. Issues and disputes were elevated to the project managers, or higher, on each side.

Either subsequently or in parallel, the project managers would negotiate the partnering or alliance agreement. This agreement was ordinarily meant to sit above and override the legal contract as long as the parties were working cooperatively.

The misalignment of goals among groups within the same organization was apparent as the project manager tried to juggle his legal and partnering roles. Some found it difficult to move easily from the combative stance taken on the contract to the cooperative approach. There was uniform agreement that the lawyers should be kept out of the alliance agreement discussions.

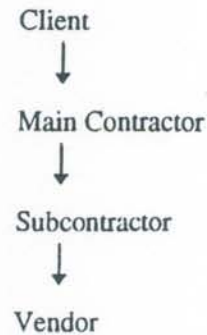
The industry is clearly still building faith in the partnering concept and insists on maintaining the old legal structure "in case things don't work out".

Integrated Teams. As described in Agreement 1 above, an integrated team should be one in which positions are filled from the alliance member companies according to individual ability and experience. The choice is theoretically irrespective of company allegiance. The projects reviewed fell along a continuum in the use and true implementation of integrated teams.

- t 1: Partners have separate teams
- t 2: Partners reduce team size and work more closely together
- t 3: Teams are moved to the same building
- t 4: Partners merge teams, but consolidated group is overstaffed
- t 5: Partners eliminate duplications and form a fully integrated team

All of the project managers cited the benefits of integrated teams in reducing duplication and costs. The two main obstacles to full integration appear to be the loss of control by individual companies and the disbelief that others have qualified personnel to fill key posts.

The client may not believe that a contractor has sufficient capability to hold the key positions, nor may the main contractor have faith in the subcontractors. It is clear that the desire to push responsibility as far down as possible has created a need for strong project management in organizations in which it may not currently exist.



It is critical that team members view each other as different but equal. This perception is difficult to achieve as one moves down the chain from client to contractor to vendor.

Refusal to accept the capabilities of others can result in overstuffed teams or those effectively dominated by clients.

The benefits of integrated teams include an alignment of goals, a clear focus on methods, and a consensus decision making process which continually stresses the good of the project. Interface problems are identified early and dealt with in a quick, and generally paperless, manner.

A negative factor frequently cited is the number and length of team meetings. Project managers must balance the amount of time and interaction needed to achieve the benefits without losing so much time that the entire process becomes inefficient.

In addition to the administrative issue, one must examine the question of who should be included on the team. One project began by embracing only the direct alliance members, those working solely on the project. They soon found, however, that certain functional positions in both the client and contractor organizations were critical to the work process. Representatives from design engineering, the fabrication yard and key vendors were eventually included in the team meetings. Each of these functions had a significant impact on the outcome of the project, and a clear understanding by those individuals of the project goals increased the likelihood of success.

Executive Management Board/Steering Committee. All of the integrated teams reported to Boards or Steering Committees comprised of senior executives from the partnership or alliance members. Rarely did the Board make any decisions, but instead offered guidance on critical issues. Responsibility for problem resolution was pushed to as low a level as possible in the team.

The Board, however, was unanimously viewed as a necessary ingredient to the success of the teams. The senior executives enabled the teams to be empowered, that is, the Board delegated the right to make decisions without referring back to itself. In addition, the Board members either directly controlled or influenced other resources in their respective organizations which would affect the progress of the project.

Dispute resolution in partnerships and alliances is approached with an entirely new attitude. "Best for the Project" and "Intent" are concepts which pervade the entire management structure. The Board is vital to this approach in that the team members must remain absolutely convinced that the senior executives are committed to the success of the partnership.

Alliance Members. Who should be in an alliance and who should be left outside? Although there is no simple answer, the project managers did not all feel that they selected the correct mix.

In one case, the alliance was admittedly too large unwieldy. Some of the companies thought important to the alliance were actually providing a well defined product with little interface with other players. In hindsight, these companies should have been regarded as vendors excluded from the alliance.

In some cases, it may be more effective to form a series of alliances rather than a single large one. For example, in an integrated contract, the installation is often a large risk which can only be borne by the installation contractor. This portion of the work might be put into a separate partnership agreement rather than included in the overall alliance.

In another case, although part of the alliance, two of the subcontractors were considered junior and not invited to all the alliance meetings. The client believes this arrangement will have to be changed as it is unacceptable to the members.

Alliance members should include companies whose performance makes a significant difference to the project, those which have an interface with at least one of the other alliance members. Although it is possible to construct an alliance which is too cumbersome, it is also possible that a simple client - main contractor partnership is too restrictive.

It is notable that some projects surveyed began as partnerships, then moved to an alliance structure including other contractors after a learning phase. Agreement 1, a 5 year services project, evolved from a partnership into an alliance. In Agreement 4, the client specifically wanted the main contractor to exert more management influence over the subcontractors than had existed in the Agreement partnership. Agreement 4 was therefore made an alliance to ensure that the main contractor had an increased interest in the subcontractors' performance.

Risk/Reward Structure. The risk/reward structure is fundamental to the entire concept of partnering and alliances. Table 2 outlines the elements and percentages used in the projects reviewed here.

We have noted a tendency for companies to make the risk sharing mechanism more complicated in their subsequent projects. Is a learning process taking place, or is the industry simply adding complexity without adding real value?

There appears to be an initial phase of true competitive discovery of which elements are important to include in the risk/reward structure. *Productivity* is the most common element in the risk/reward structure, measured by manhours or barge days. *Total cost* may also be used as a substitute variable for productivity.

Clients who have not explicitly linked *schedule* into the sharing mechanism in one agreement have included it in their subsequent projects. Some who have used a *quality* measure commented that it is difficult to quantify and should be considered a requirement rather than a part of the risk/reward structure.

Percentage sharing in the agreements ranges from a simple 50/50 on the upside and downside to a contractor's taking all the downside risk (low risk projects) or the client's taking all the downside (high risk projects). In most cases, the contractors are limited to a cap on the downside.

Of great interest is the strong general agreement that the details of the risk/reward sharing are actually known to very few people working on a project. Although the percentage splits may affect some top management decisions, it is the *concept* of sharing any cost savings which drives individual and team behavior.

It is the nature of the industry to concentrate on quantifying and eliminating risk through mathematical calculations. There is comfort in assigning precise probabilities to certain outcomes, even when the precision of the output far exceeds the gross level assumptions of the inputs. It appears from the projects surveyed that time spent fine tuning the risk/reward structure itself may well result in no more actual cost savings than a simple sharing based on a few key elements.

Successful Implementation of Partnering and Alliance Agreements

Although the use of partnering and alliances has been growing steadily over the last several years, the nature of longer term development projects has meant that little industry learning has been exchanged on what actually worked in implementation and what did not. Management literature is replete with articles espousing the theoretical benefits of alliances and listing such self-evident advice as be sure to marry the right spouse. What we shall review here is the practical experience of project managers in the successful implementation of agreements:

- Choosing the Project
- Partner Selection
- Setting the Targets
- Team Building
- Facilitators
- Rewarding Team Members

Choosing a Project Candidate. There was surprising commonality of view on what type of project might be considered for a partnership or alliance. Major characteristics should include some or all of the following:

- *Complexity.* The project should have multiple interfaces which could benefit from companies working closely with one another. A simple standard work contract may not have enough potential saving to outweigh the time and burden of administering a risk/reward sharing agreement.
- *Fast Track Schedule.* A fast track project usually includes a design-while-build element, with the foreknowledge that many new demands will arise which cannot be clearly defined at the start.
- *New Technology.* Any project using new technology presents the opportunity for risk sharing which will increase the flexibility of the partners and enhance their willingness to work together.
- *Expected Surprises.* With similar characteristics to the Fast Track Schedule, some major projects accept at the outset that new information will change some parameters after work is in progress.
- *Duration.* Although duration is not the most critical factor, most project managers felt that an 18 month to two year project would be the minimum likely to benefit fully from team building costs.

Partner and Team Selection. The very basis of risk/reward sharing implies that one partner's problems and opportunities will become linked to another's. It therefore becomes even more important than in a traditional contract to be convinced that the companies in the alliance can actually perform as they have indicated.

In several of the alliances studied, at least one of the participants was operating outside of its normal range of experience, resulting in lower productivities and higher costs than originally estimated. Because of the tendency to require more complete packages from subcontractors and vendors, clients and main contractors must spend more time on the front end assuring themselves that the smaller players have the project management capability to perform as they claim. One manager advised meeting the responsible parties to assess their personal level of commitment.

Setting the Targets. Underlying the success of the entire risk/reward scheme is the perception by the partnering and alliance members that the targets set are fair and achievable. Although seemingly an obvious point, there is some concern that in the effort to produce significant cost savings through alliancing, clients may begin to set unachievable targets. If that is the case, the targets completely lose their significance as drivers of partner behavior and no effort will be expended to reach them.

Who actually sets the targets? In some cases, the target is simply the final estimate or bid of the partner or alliance. In others, the client reviews the total estimate with the alliance members and negotiates the overall cost down to a lower number. This then becomes the project target.

In the longer term service type projects, norms are discussed and agreed between the client and the partners on an annual basis and reflect either actual or expected productivity improvements. It was noted in these two projects that productivity improvements move along a declining curve. Unless the work changes significantly, productivity gains will diminish with time and may cease to be an effective element in the risk/reward structure.

The timing of when the alliance truly begins functioning is an important element in its ability to reach or surpass the target. The alliance must be in place and the targets agreed early in the project for the teams to have a chance of materially influencing the cost. Because of the trend to negotiate standard legal contracts before finalizing a risk/reward agreement, in some projects work may be well underway before the team actually starts functioning. Such delays will necessarily diminish the group's ability to improve on the target.

Team Building. Most of the alliances engaged in specific team building exercises and considered it a necessary ingredient in developing a cohesive working environment. One project team held numerous sessions over a two year period, sometimes including spouses and families. The managers arranged working sessions, dances, and family days-out. The alliance members are adamant that the close personal relationships which developed made it impossible to act in a way which would not benefit the entire group.

Other teams lamented the lack of adequate training and team building. All would recommend significant effort be spent early on to define individual and company roles and to align the goals of the team members.

Those projects which worked through integrated teams reported significantly more benefit from the team building exercises than those which retained separate project groups. One manager commented that although the team building sessions were successful, he could see the benefits dissipating as the members walked out the door and back to their separate company offices.

Separate locations was frequently mentioned as an impediment to smooth team functioning. Those who worked in close proximity, preferably in the same building, retained a cohesive sense of team purpose. Conversely, those teams with members in different cities complained of days lost traveling to routinely scheduled meetings.

There was widespread agreement that teams took about months to coalesce into a smoothly functioning unit. There was also disruption when a new member was later added although as time passed a new member would have less impact on the established team culture.

It was generally felt that people who had worked in an alliance or partnering project had formed a fundamental understanding of the team concept and would fit in more quickly into the next team than those who had no experience. However, because each team was unique it was felt that team building exercises would have to be repeated on any subsequent projects, and that some months would be needed to achieve a certain level of comfort among members.

Facilitators. Most of the projects used facilitators during both team building and working sessions. Although both internal and external personnel were deemed helpful, outside facilitators were almost always viewed as more independent and neutral. Project members commented that client facilitators sometimes seemed to have their own agendas, quite separate from the facilitation. Another comment was that the facilitator should be third party simply to be sure there was no appearance of trying to influence outcomes.

Rewarding Team Members. Frequent and public acknowledgment of team success was viewed as an important element in sustaining the team spirit. One project published a monthly list of Team Victories along with a cumulative chart of recognized savings. Others noted that public recognition of members who had made significant contributions should be a normal course of doing business. Several commented that on their next project, they would increase the use of public acknowledgment.

One project described an event which highlighted the difficulty of combining different company policies into a truly integrated team. A client member of an alliance presented bonuses to its employees to reward them for cost savings made to date. Serious dissension arose when other partners' team members learned that the client members had received cash bonuses and they had not. The entire "team" concept was questioned since all members had been working for the good of the project and had contributed to overall cost improvement. The group subsequently identified this as a critical element to be discussed and resolved at the outset of any project.

Pitfalls

Partnering and Alliances are neither easy nor always successful. They will have a greater chance of succeeding in the future, however, if the industry is candid in sharing its potential pitfalls. Project managers were helpful in discussing issues which could be improved upon in future projects.

- Misalignment of Goals
- Weak or Uncommitted Partners
- Unachievable Targets
- Policies and Procedures
- Bureaucracy
- Complacency
- Regressive Behavior

and refused to share information. The entire project group was thus weakened by this member.

Unachievable Targets. As discussed in the section on Setting Targets, members of a partnership or alliance must believe that the targets are fair and achievable. If not, they will have no incentive to change behavior and work with others to reduce cost or improve schedule.

Misalignment of Goals. It is imperative that all team members are clear on the overall goal of the project and their particular accountabilities. The industry has already experienced projects where the client felt schedule was the most important issue, while the contractors on a lump sum payment basis were concentrating solely on cost reduction.

An example is found in Agreement 4, in which the client implemented a risk/reward scheme with the intention of forcing more management attention from the main contractor to the subcontractors in the alliance. Because of the introduction of a schedule incentive, the main contractor pushed to finish his work early so the subcontractors could begin their portion. In order for this incentive to have been effective, the main contractor must have believed that it was actually possible for him to influence the others.

The "Best for the Project" mentality can only be sustained if the individual partners are convinced that the final outcome will be fair and equitable, irrespective of what is in the legal contract. This concept is quite foreign to traditional ways of doing business in the industry, but fundamental to the success of partnerships and alliances.

A counter example is the insistence of a client that a particular contractor achieve an x% productivity improvement in a follow-on project. At a certain stage, the productivity was substantially worse on the second project, therefore making the target seem completely unrealistic and not worth attempting.

A somewhat broader issue is the alignment of goals when different structures are used within a large project. One of the groups surveyed was an alliance working on one portion of a project, while a traditional contract was being used on another portion. Some companies were participating in both portions and there was one overall project manager. Not surprisingly, this structure was very difficult to manage as different behaviors were expected from the same company in each portion.

The most realistic targets will be those set by clients and contractors together taking account of prior history. As noted previously, however, many of the candidate projects may by their nature have little relevant history to guide them.

The potential for goal conflict should be addressed in the agreement phase of the project.

Policies and Procedures. Several project managers commented on the difficulties of aligning the policies and procedures of the various team member companies. The issues ranged from different planning systems to the aforementioned problems of bonus schemes extant in member companies.

Weak or Uncommitted Partners. As mentioned previously, the new linking of contractors and clients through the risk/reward structure places a greater burden on the ability of each party to perform according to expectations. Several weak partners were identified in the projects surveyed. In many cases, the weakness arose from the requirement to perform outside of their directly applicable experience. This issue will continue to be important, as the very projects chosen for alliances include a strong measure of the new and unexpected.

The most divisive problems were actually those affecting personal outcomes. The bonus issue was mentioned by all managers as being a serious and contentious issue. A second example of diverse personnel policies came with the temporary relocation allowances of clients. One operator was willing to pay his personnel twice the monthly housing stipend awarded by his partner to members of the same team.

The problem of the uncommitted should be viewed separately from that of the weak. Not all parties are convinced that the alliance structure is viable or worthwhile, but they realize that they must appear to be cooperative in order to be awarded the work. In all projects, certain individuals from clients and contractors were removed from the teams as they proved unable to adapt to open communication with others. However, in some cases a particular company was never fully integrated into the team

All participants recognized the difficulty of aligning long standing company policies just for one project. However, they felt these issues should be aired and recognized at the outset.

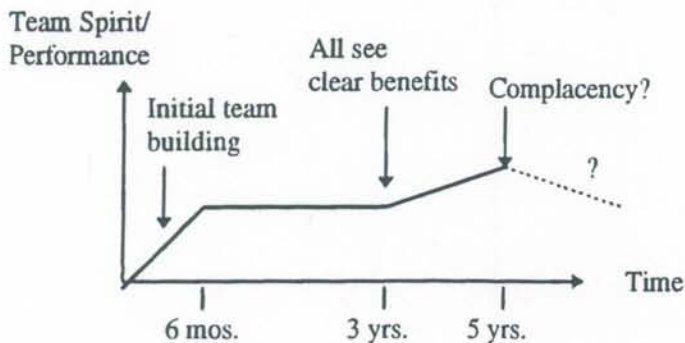
Bureaucracy. Meetings, team building sessions, renegotiation of targets and more meetings. Partnerships and alliances create an administrative burden which may border on bureaucracy if not very carefully managed.

We have discussed most of these issues above and noted that successful alliances uniformly extol the necessity of integrated teams and consensus oriented meetings. A frequent complaint, however, is that there are *too many* of these meetings. Striking a balance must clearly, then, be difficult.

An additional burden not heretofore mentioned is the necessity to administer changes to the targets. New information as the project advances or the desire to include or exclude specific items require adjustments to the targets as work progresses. These all need to be agreed, administered, and then tracked.

It is critical that the cost of the alliance administration is less than the additional benefits. The management must, therefore, continually monitor the value added by incremental expenditures so that the alliance structure does not take on a life of its own.

Complacency. How long is too long for a partnership? These cases give a consensus guideline of 18 months to two years for the minimum project life. But is there a maximum? One manager from a long term services agreement described the following curve:



For the first six months, the team was on a sharp learning curve and struggling to achieve a coherence which would allow it to work together effectively. Some disruptive members were weeded out. During the following two and a half years, the team worked well together, achieving productivity savings annually and integrating new members as necessary. After a three year period, even the most doubtful individuals were convinced that the alliance produced gains which would have been highly unlikely in a traditional structure. At that point, with final resistance broken, there was a new sense of team strength which resulted in even greater success.

When, then, does complacency set in? In the scenario above, the manager estimated at about the fifth year. Other project managers wondered if it would not come earlier. They had noted the need to "freshen up" teams by injecting

new blood from time to time. Perhaps an alliance, in business, has a predictable life cycle.

Regressive Behavior. What happens when things seriously wrong? There is no doubt that the initial reaction of the players, in spite of their training, is to go back to their corners and pull out the contract.

Not all of the projects surveyed went smoothly. For example, a freak accident in Project 5 completely negated the original schedule and caused a serious cost overrun. After several day cooling off period, the project managers and their seniors returned to the *intent* of the partnering agreement and negotiated a settlement *without* reverting to the legal contract.

A number of smaller incidents were cited which illustrate the difficulty of maintaining true culture change in the face of real problems. In all cases of conflict, it was management's belief in the partnering and alliance concept which prevented the agreements from being seriously challenged.

Economics

Is it all worth it? What benefits actually accrue to partners and alliance agreements that could not have been achieved with improved management of traditional contracts? There are no doubt factions within the industry which fall first into supporters and detractors of the alliance concept. However, many companies are honestly trying to assess the costs and benefits to determine which, if any, of the potential projects could be successful candidates.

Because of the project nature of the industry, there is little control against which to judge cost saving claims made by an alliance. A true disbeliever, therefore, can always maintain that savings would have been made in any case. However, the managers in this survey are unanimously convinced that their projects were and are more cost efficient under a partnering or alliance structure than they would have been under a traditional one.

Project 6, drawing on a long history of relatively similar platforms, claims a 15-20% saving over a three year period when per unit costs before and after the partnership are compared.

Project 1 has achieved a 30% reduction in per unit non-recurring costs over a five year period. In addition, a 25% savings in total cost was calculated for a particular task performed within the overall agreement.

Project 3 estimates that 80% of its identified cost savings were due to the partnering approach and 20% could have been achieved under a traditional structure. This would

translate into an overall savings of 8% on the total project cost.

The underlying reason for increased cost savings in a partnership is the recognition by all parties that any saving is to be *shared*. Project managers report a greatly heightened awareness of costs compared with a typical lump sum job.

Several noted that the approach taken by client inspectors towards standard specifications was radically different under an alliance. Whereas in a traditional contract the client would insist on "sticking to spec" regardless of the requirements of the particular project, under an alliance the client worked with the contractor to find a lower cost, "fit for purpose" solution.

In addition, the use of integrated teams provides all parties with a broader perspective on problems which would not have been possible working singly. One manager cited the use of the client's and main contractor's purchasing power to lower the cost of items procured by a subcontractor. In a traditional contract, this emphasis on helping others to reduce their costs for the benefit of the project is not to be found.

Conclusion

Although the industry is still learning how to maximize the effectiveness of partnering and alliance agreements, there is clearly enough information to draw some conclusions on practices which do work and those which do not. We have explored a number of these issues in the preceding paragraphs.

The managers surveyed are uniformly convinced that the partnering and alliance structure has provided significant benefits as compared to a traditional contract. They would not, however, claim that all projects are potential candidates for alliances.

There is clearly a momentum for trying new project structures, finding better incentives, and exploring different methods of implementation. The best way forward for the industry will be to share practical information on these experiences to ensure a collective movement along the learning curve.

Table 1

Partnering/Alliance Agreements

	<u>Site</u>	<u>Value Mil</u>	<u>Type</u>	<u>Service</u>	<u>Length</u>	<u>Alliance</u>
1.	U.K.	\$150+	Bid	Engineering services	5 yrs+	Tasks
2.	U.K.	\$150+	Bid	Integrated offshore	Project	Yes
3.	U.S.	\$50-100	Bid	Fabrication of topsides	Project	No
4.	U.S.	\$50-100	Negotiated	Fabrication of topsides	Project	Yes
5.	U.S.	<\$50	Negotiated	Offshore installation	Project	No
6.	M.E.	<\$50	Negotiated	Integrated fabrication and offshore	5 yrs+	No

Source: SPE 30376, 'An International Perspective on Risk/Reward Contracting: Comparison of U.S., Middle East and U.K. Alliances', Susan Farrell, J. Ray McDermott, September 1995

Table 2

Risk/Reward Elements

<u>Service</u>	<u>Target Measure</u>	<u>Schedule Element Included?</u>	<u>Risk Sharing</u>	
			<u>Upside</u>	<u>Downside</u>
1. U.K. Engineering	Milestones 70% Productivity 20% Quality 10%	Yes, in milestones	50% client 50% contractor	0% client 100% client
			<u>special tasks</u> 50% client 50% contractors	<u>up to x%</u> 0% client 100% contractors
<u>> x%</u> 100% client 0% contractors				
2. U.K. Integrated offshore	Total project cost	No	25% client 75% contractors, split equally	contractor responsible loses profit on 1st 10% of overrun; client covers the rest
3. U.S. Fabrication of topsides	Manhours total	No	50% client 50% contractor	50% client 50% contractor
4. U.S. Fabrication of topsides	Manhours total	Yes	<u>schedule + target:</u> 60% main con. 20% subcon. 20% subcon. <u>target only</u> 50% client 50% main con.	<u>target</u> 50% client 50% main con.
5. U.S. Offshore Intallation	Barge day total	No	<u>13%</u> 50% client 50% contractor <u>14-30%</u> <50% client >50% contractor <u>>30%</u> <<50% client >>50% contractor	50% client 50% contractor <50% client >50% contractor 0% client 100% contractor
6. M.East Fabrication + offshore	Total saving on innovative practices	No	<u>fabrication</u> 0% client 100% contractor <u>offshore</u> 100% client 0% contractor <u>innovative practices</u> 50% client 50% contractor	0% client 100% contractor 100% client 0% contractor 50% client 50% contractor

Source: SPE 30376