

# **PROJECT PARTNERING AND ALLIANCING ON THE WEST COAST ROUTE MODERNISATION PROGRAMME**

Stephen Norwood BEng, MSc  
Senior Engineer, Parsons Brinckerhoff Ltd,  
West Coast Route Modernisation Programme, UK

## **Abstract**

In this paper the concept of partnering is discussed with reference made to project specific and long-term arrangements, each with detailed advantages and disadvantages. Focus is placed on the organisational structure developed within project partnering as increasingly, clients and construction companies turn to this form of working style in a quest for aligned objectives. This leads onto a discussion of results from an empirical survey with senior project managers, who were actively engaged on the West Coast Route Modernisation programme. The study concludes by looking at each manager's direct experience of partnering and their respective views on how well the West Coast Route Modernisation programme was served by project partnering and alliancing arrangements.

## **1. Introduction**

Conflict within the British construction industry tends to be deep-rooted and perhaps over the years has become unintentionally nurtured within a number of organisations. However for those involved with this issue, being able to eradicate adversarial relations has proved somewhat more difficult than originally envisaged.

Back in July 1994, the Latham Report recommended the concept of partnering between the client and contractor as well as client and supplier within a procurement arrangement. Within a contractual context, the report states that both “parties (should) agree to work together, in a relationship of trust, to achieve specific primary objectives by maximising the effectiveness of each participant’s resources and expertise.”(1)

For this to succeed however, it requires that the client and contractor maintain an openness and commitment to discuss problems as soon as they arise and on resolving them in a no-blame culture. Good relationships built on mutual trust are beneficial to all parties concerned and it is because of this belief, not least in the world of construction, that the wider application of partnering can bring enormous benefits to the industry, which has led to a focus on the subject within this paper.

## **2. The Concept of Project Specific and Long-Term Partnering Arrangements**

Adversarial relations between parties within construction projects often start due to a variety of reasons. Some of these include differences in project goals and objectives, lack of control of events affecting performance, excessive demands on resources, insufficient time to make the required decisions, greater demand for higher quality than originally specified and failure of parties to meet commitments. Schultzel and Unruh state that in many cases, contracting parties have “a predominate focus on preparing rather than resolving disputes and claims.”(2)

A starting point for overcoming destructive elements within a project, or within the construction industry at large, is communication. This should be based on open clear dialogue, shared concerns, ideas and information. Coupled with this is trust, which companies must exhibit if the agreement is to be fulfilled and allow the process of removing barriers, improving working relations and project morale.

Within a legal setting, partnering may take on a range of forms “from non-binding charters (through) to detailed agreements which modify traditional contractual arrangements on specific projects.”(3) A non-binding partnering charter enables each party to agree upon defined principles, undertake their duties in a spirit of co-operation and mutual trust, share problems and avoid disputes by communicating with each other in the early stages of any potential disagreement arising.

A workshop is often the starting point for a successful partnering arrangement. The workshop involves senior management from all parties plus technical, contractual,

legal and financial leaders. A professional facilitator will often be used to assist the smooth running of events.

Following on from a workshop, it is normal for a partnering charter to be developed, embodying a general statement committing each party to the principles of partnering. Key project objectives should be clearly outlined as well as “procedures for (joint working), monitoring progress and building on lessons learned”.(4)

A culture of “no-blame” should be fostered within the partnership, with problems discussed at their early stages of development. Disputes that cannot be resolved at lower organisational levels should be elevated to senior management through a well defined escalation procedure. This is emphasised by Broome, who believes that “the problem resolution aspect relates to having an established disputes ladder”.(5)

Within this model, disputes would be raised at the lowest possible level within a project, subject to a time constraint. If no agreement can be reached, it is elevated to a higher level of management, again subject to a specific time period for resolution. This process is repeated until there is an established agreement between the parties, diminishing the prospect of claims being raised at the end of the contract period.

An important aspect for companies to take account of whilst creating the charter is ensuring that there are no inconsistencies with existing contract documents. The charter should not in any way alter the parties responsibilities under the contract, but instead, enhance their focus on aligned objectives.

Project specific partnering has over the past few years become increasingly complex, when considering binding arrangements. In a number of cases, contract documents have been modified into one complete package incorporating the principles of partnering. This approach is less common in the UK, where projects are undertaken with the contract sitting independent of the partnering agreement, but with appropriate modifications made so as they complement each other.

Consequently, both binding and non-binding partnering charters, defining “co-operation and communication between the parties”(6) are not confined exclusively to projects, but have become established within long-term relationships between companies. Primarily long-term partnering arrangements are established by companies in order to reduce costs, improve efficiencies through time savings, improve quality and safety management, standardise working patterns through repeated work and sharing of resources. Because of the time periods involved, improvements can be made continuously and any mistakes and inefficiencies made on previous projects can soon be rectified. As each project is undertaken, the learning curve for the partnering companies becomes less arduous.

Offset against these advantages is the fact that as the partnering relationship develops through time, the competitive edge of the organisations tend to recede as the arrangement can become “comfortable”. Inevitably cost savings may decline if procedures are not in place to monitor performance and ensure that the client is receiving value for money.

Partnering that is taken to a more advanced level is known as “alliancing”. Within certain industries, most notably the oil and petro-chemical sectors, projects tend to be large and complex in nature, have associated high start-up and procurement costs and require a relative degree of co-operation between the various parties involved. Alliances formed by companies undertaking projects of this nature, will have at their centre, a highly developed incentive scheme encompassing a target cost contract with profit and risk sharing elements.

Likewise, if the alliance members do not achieve targets set within key performance indicators on a range of issues covering cost control through to quality and safety management, then penalties can be invoked. Contentious relations within alliances tend to be rare, as the centralised scheme links each of the members collectively to the final outcome of the project rather than on the basis of individual company performance.

A breakdown of partnering into project specific, long-term and alliancing arrangements with associated advantages and disadvantages are shown in Tables 1, 2 and 3 respectively.

**Table 1: Advantages and Disadvantages of Project Specific Partnering**

<b><u>Advantages</u></b>	<b><u>Disadvantages</u></b>
<ul style="list-style-type: none"> <li>• Partnering arrangements can be introduced to a project at any time within the programme. However, greater success can be achieved if partnering is undertaken by parties within the early stages of the project being set-up.</li> <li>• Companies, if they so wish, can choose either to enter a binding or non-binding agreement, depending on the given circumstances and type of project.</li> <li>• Workshops and training courses can be initiated with relative ease, introducing all members of the team to the new working arrangements and heightened levels of communication.</li> </ul>	<ul style="list-style-type: none"> <li>• Not suitable for smaller projects of little contract value, due to the high initial costs when establishing partnering arrangements.</li> <li>• Difficulties are sometimes encountered when partnering is implemented at the later stages of a project. Team members can become unwilling to change and confrontational working styles are difficult to breakdown.</li> <li>• Limited only to improving cash flow and reducing costs as this form of partnering lacks an incentivised financial scheme.</li> </ul>

**Table 2: Advantages and Disadvantages of Long-Term Partnering**

<b><u>Advantages</u></b>	<b><u>Disadvantages</u></b>
<ul style="list-style-type: none"><li>• Resulting from the extensive period of time over which this form of partnering operates, the culture of trust and understanding between the client and partnering companies is allowed to develop, with any perceived reservations soon overcome.</li><li>• Following the completion of each new project, lessons are learnt and built upon, enabling improved efficiencies to be made and greater ease within work processes.</li><li>• As the relationship evolves through time, this form of partnering enables new aims and objectives to be reconciled and incorporated within the original agreement between the companies.</li></ul>	<ul style="list-style-type: none"><li>• As long-term partnering arrangements continue, cost savings and time management prove increasingly difficult to improve upon.</li><li>• The working relationship between long-term partnering companies can develop too closely, giving rise to complacency and an artificial view of the business environment they operate in.</li><li>• Long-term partnering restricts emerging companies from entering the market and in doing so, reduces growth and free-market competition.</li></ul>

**Table 3: Advantages and Disadvantages of Alliancing**

<b><u>Advantages</u></b>	<b><u>Disadvantages</u></b>
<ul style="list-style-type: none"> <li>• At the heart of the alliance is an incentivised target cost contract, incorporating safety and quality issues with an established mechanism, ensuring that partnering companies participate in profit sharing and receive penalties when targets are not achieved.</li> <li>• Because the alliance normally links each alliance company to the outcome of the project, this tends to engender a greater co-operation amongst the parties, encourage free flowing communication and a willingness to overcome disputes before they develop significantly.</li> <li>• In cases where the viability of a project going ahead may be heavily influenced from falling prices such as oil, driving costs down become a major priority. Forming an alliance under these circumstances helps to deliver this objective for clients as opposed to working under a traditional type of contract, which provides no flexibility to adapt if market conditions change.</li> </ul>	<ul style="list-style-type: none"> <li>• Failure on behalf of the alliance to achieve project targets, can lead to penalties being placed upon each of the members, regardless of which party was at fault.</li> <li>• Establishing incentive targets for an alliance about to embark upon a long-term partnering arrangement can prove to be fraught with difficulties, as projects undertaken tend not to be fully defined or known at the very outset of the relationship.</li> <li>• If project goals or targets are not fully defined or integrated within the initial stages of programme and design development, alliance members may experience difficulty in exercising sufficient influence over final cost reduction and quality issues.</li> </ul>

### **3. Organisational Structure Adopted for Project Partnering**

In an effort to enhance “greater understanding, trust and collaboration and increased effectiveness”(7) through partnering, client and contractor teams have to integrate more fully. For this to be successful, there has to be a radical change to the established cultures within each organisation, normally found working on opposite sides of a contract from each other. A well documented means of initiating greater integration of work processes is through the establishment of workshops.

The primary function of the workshop is to act as a project stimulant, motivating people from each of the organisations to engage and combine skills for the good of the project. By educating staff through training of this nature, cultural change and integrated team working can start to take root and grow at a greater pace than if partnering had been allowed to develop under its own steam, with no or little training given.

In essence, confidence can develop within the newly combined team operating from the same offices, as objectives on commercial issues become increasingly aligned and working relationships more amicable. Inevitably, team members place increasing importance on project association as opposed to individual company allegiance.

Leading the team “involves the creation of a core group or, in the case of an alliance, an alliance board.”(8) Represented on the board are senior management from each of the involved parties, with affiliated proportional voting rights depending on what has been agreed upon. Normally, board members are not involved with running the project on a daily basis, but determine which powers should be aligned to the board and its function in relation to the client. Key issues such as selection of the project target cost, risk allocation, individual performance targets, scheduled milestones and the effect of cost and programme variations upon the project, are taken at this level.

Within the integrated team, costs can be reduced as a result of eliminating “man marking”. Decisions affecting the project on a daily basis, are taken by designated senior personnel from each of the organisations and “earmarked” as the best people to undertake their specified roles.

#### **4. Empirical Research**

##### **Methodology**

For this part of the study, a questionnaire was compiled on project partnering and alliancing arrangements specific to the West Coast Route Modernisation programme (see Appendix).

Questions centred around general topics such as the enhancement of trust between parties, the extent to which the development of scope impacted upon the effectiveness of the alliance agreements and any improved cost reductions and savings made throughout the programme as a whole.

After conducting interviews with seven senior managers either verbally or by email, each coming from a range of engineering disciplines and representing both client and contractor teams, the findings are presented in an attempt to reflect how effective project partnering/ alliancing had been on the programme.

## **Analysis of the Questionnaire**

### **Trust**

It was believed by the majority of managers interviewed, that the build-up of trust within the alliance arrangements had not reached the ideal for which it had originally been perceived within partnering.

There have been a number of factors contributing to this. One in particular resulted from the dissimilarity in profit margin that contractors from different disciplines work under. It was viewed that the share of profit was particularly balanced in favour of the average signalling consultant whose overhead mark-up is traditionally higher in relation to that of a civil engineering contractor.

The actual use of the word “trust” led to misunderstanding and to some degree, people believed it to mean literally that. It was felt to be completely detrimental for managers in key positions, to believe that they should never be challenged or questioned on issues they had been committed to.

In notable cases, trust had been successfully established within alliances, particularly on the Watford Bletchley Alliance, where by combining resources, risks had been mitigated for successful blockades as well as easing the establishment of design coordination.

### **Scope Changes**

The consensus amongst the managers was that the repeated scope changes within the programme, impacted severely upon the effectiveness of the alliances. The focus of the teams were compromised in terms of construction methods employed and where work was of a purely renewals nature, the client viewed the contractors as holding back on design development. Equally though, the contractors were caught up in indecisive “what ifs”.

The feeling was that scope needed to be pinned down from the very start of the programme, with a target cost negotiated before any work could begin. It was felt that key decision makers within the client, did not see the need to formalise the changes in scope or client requirements. This was not helped through the lack of understanding of roles and responsibilities between the client and the various alliances.

### **Programme Management**

Not all those interviewed, agreed upon the fact that prior to 1999, changes made to the programme management structure had been detrimental to the alliances. The client had originally wanted control of the programme management team but had to relinquish this role through lack of resource. Since the departure of the initial project management consultant, each of the successive project management companies embraced alliancing and tried to move it forward, albeit in different degrees of commitment, depending on whether schedule or cost was viewed as their key priority.

Following alterations to the programme management structure, the client was criticised for trying to lessen its exposure to risk and for reducing its share of work. Counteracting this viewpoint from the client’s side, one manager believed that the biggest underlying argument was work share and equally, the biggest underlying risk



was work and planning integration. Commenting further, it was believed that invariably the client was left to undertake this workload, as there was a general reluctance from the alliance parties to carry this risk, principally through them having an appropriate level of work and profit, including the chance of additional gain.

### **Spirit of Openness and Co-operation within the Alliances**

There was general agreement that sufficient openness and co-operation had developed amongst the alliance parties, although this did not quite reach its full potential. The concept became tainted when the client requirements were not adequately defined, poorly documented and changed without clear understanding from both client and contractors.

In the case of signalling, companies operate in a niche market and tend to prefer working from a disposition of isolation. Change, which inevitably results through greater openness and co-operation, is not readily embraced.

Resulting from cases of poor alliance performance, the client team reverted to a client/contractor relationship without altering the alliance arrangements. A view held within the client side, believed that the basic principles of alliancing were good, including “no claims” and the dispute resolution process.

In reality however, it was questioned if they really worked as most behaviours and drivers come from senior board level members who exist outside of an alliance and inevitably oversee other non-alliance projects at the same time. As boards primarily demand profit, cash and risk minimisation and with requirements changing over time, it was felt inconceivable that this would not have any impact on alliance team members, as they are paid and reviewed by their parent companies.

### **Target Cost**

In terms of significant cost savings being achieved through target costing, there were reservations from most parties as to this being the case. Notable exceptions however, included the Wembley Alliance that completed the Train Protection Warning System (TPWS) at a target cost with gain share.

In general though, due to time constraints, almost all work had been completed through emerging costs. Other alliances became more relaxed and tended to leave the client with risk. Those managers within the client body were inclined to believe that the impact of risk could have been minimised by contractor co-operation and considered them to have exploited this risk.

Events were further fuelled through developments being processed too fast for the client to take on board, as Network Rail managers could not share information at the pace required of them. It was considered that any knowledge gained, which could have been enhanced and brought forward to the next contract, was not, because of inadequate dialogue and inappropriate feed back from the client’s headquarters.

### **Elimination of Man Marking**

In some cases “man-to-man marking” took place. The programme management team supplied people to the contractors within the areas to do work that was believed

should have been the sole responsibility of the contractors. Consequently, it is considered that money was not spent efficiently in this regard.

On other issues, some alliances became “soft” as people did not like upsetting others because of the partnering arrangements in place. Inevitably hard decisions were not taken, resulting in issues not being fully understood and dealt with accordingly. At a later date, man marking actually increased as a direct result of this.

However, at the opposite end of the spectrum, where client staff were able to effectively integrate with those from the contractor, cost savings were considered to have been achieved on behalf of the client. Because the programme was milestone driven, extra resources were required to “double shift” many management aspects of the programme. It was recalled that within these alliances, although double staffing was needed in order to meet deadlines, man marking was avoided.

### **Interface Between Alliance Parties**

Looking at effective interfaces from the perspective of the client, one manager stated that all Network Rail alliances experience risk from the action of adjacent projects. These risks ranged from there being a need for adequate resources within possessions through to funding and from staffing requirements within management levels through to data control. More critically, it was believed that this could lead to problematic design and system integration as each project is in flux. The result being that Network Rail holds all of these risks and has to attempt to manage itself internally in order to create a stable base. There was the held belief that on the West Coast Route Modernisation programme, effective interfaces between parties had failed to become properly established.

Other managers took the view that effective interfaces depended on who the alliance partners were, as more mature companies were able to manage interfaces better with suppliers and subcontractors.

### **Contractual Barriers**

It was generally perceived that programme costs had not reduced significantly through the removal of contractual barriers. In reality it was difficult to measure because of scope changes, lack of scope definition, constraints in access and restrictive deadlines for completion. Beneficially however, removing contract barriers had helped to eliminate long protracted negotiations and place contracts more quickly.

From another angle, it was sighted that possibly programme costs would have been significantly greater as a result of claims and delays, had the client preferred to utilise a different contracting route that would have controlled scope changes much more rigorously, as opposed to alliancing.

## 5. Conclusions and Recommendations

This paper has described the various forms of partnering and alliance arrangements being utilised within industry today. From this, a number of advantages and disadvantages were drawn from the study of these contracting arrangements. This was used as a backdrop into the analysis of answers to a questionnaire based on the working experiences of seven senior managers, employed on the West Coast Route Modernisation programme.

In summary, many of the managers believed that although they agreed upon the basic principles of alliance agreements, a programme of this size and complexity and the railway industry in general, are probably not appropriate test beds for developing long-term alliance arrangements. Risks tend to be far greater on larger projects, which can lead to an undermining of the benefits derived from alliance agreements.

Clearly underlined from the series of interviews conducted, was the fact that on the programme:

- Alliances were not as successful as they could have been owing to the lack of scope definition.
- Not until the scope is clear and agreed upon, should the tendering process commence and alliances be formed.
- There should be a guarantee of strong client participation as well as control within alliances and an understanding of what partnering requires, coupled with regular reviews in a bid to measure performance.

There was the belief within the client side, that target costing does not work if the project is time constrained. It encourages the contractors to load the estimate, become slow in challenging the price and allow for delays to take place until the client has to make a decision. This results in estimates and risks becoming over generous, teams over-resourced and allows for a “gain” windfall by being lethargic.

Of fundamental importance in conducting future alliances successfully within the WCRM programme, is the provision of adequate time in order to reach an agreed target cost, a scope with clearly defined requirements and for any access issues to be resolved at an early stage. The alignment of objectives must be in place with all parties pushing in the same direction.

Accompanying this should be a blend of experienced personnel in sufficient numbers, who have been involved in alliancing and understand the benefits and disadvantages that can be involved. There should be no reversal of key decisions and the client should be provided with control in order to manage the project and interfaces effectively.

## References

1. **Latham, M**, “Constructing The Team”, Joint Review of Procurement and Contractual Arrangements in the United Kingdom Construction Industry, HMSO, July 1994, Chapter 6 – “Selection/Tendering Procedures”, p.62
2. **Schultzel, H.J and Unruh, V.P**, “Successful Partnering : Fundamentals for Project Owners and Contractors”, John Wiley & Sons Inc, 1996, Chapter 2 – “What is Really Involved in Partnering?”, p.19
3. **Roe, S and Jenkins, J**, “Partnering and Alliancing in Construction Projects”, Sweet & Maxwell Ltd, 2003, Chapter 1 – “The Nature of Partnering and Alliancing”, p.2
4. **Roe, S et al**, (2003), p.2
5. **Broome, J**, “Procurement Routes for Partnering : A Practical Guide”, Thomas Telford Ltd, 2002, Chapter 2 – “Partnering”, p.12
6. **Roe, S et al**, (2003), p.3
7. **Broome, J**, (2002), p.23
8. **Roe, S et al**, (2003), Chapter 3 – “Structures for Partnering and Alliancing”, p.40

## Appendix

### **Questionnaire Related to Alliancing and Partnering Arrangements on the West Coast Route Modernisation Programme**

1. Owing to the sheer size and complexity of the programme, has trust within the alliance/ partnering teams been allowed to develop fully and enhance working relationships?
2. Has the effectiveness of the alliance/ partnering arrangements been compromised in any way, as a result of regular revisions to the scope of work and poorly defined client requirements?
3. As a result of programme management upheaval within the early stages of the West Coast, do you believe this may have hindered the effectiveness of the alliance/ partnering arrangements?
4. Have the various alliance/ partnering arrangements on the programme, provided sufficient spirit of openness and co-operation amongst the parties involved?
5. Given the fact that the programme management team working at Eversholt Street is fully integrated, has this helped in the development of an improved target cost leading to significant cost savings?
6. Has the client benefited in terms of cost savings through identification of the best person for the job and the avoidance of “man-to-man marking”?
7. Did the various alliance/ partnering arrangements help to achieve effective interfaces between alliance parties, suppliers and subcontractors in all areas of the work?
8. Have programme costs reduced significantly, through the removal of contractual barriers, helped by the introduction of alliance/ partnering arrangements?
9. Given your experience on the programme, would you recommend a similar network of alliance/ partnering arrangements for future West Coast projects?
10. Have you any recommendation(s) that would make future alliance/ partnering teams more successful on the programme?