

COMMERCIAL STRUCTURES AND PROJECT METHODOLOGY – DEVELOPMENT, PLANNING & IMPLEMENTATION

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Abstract: In today's submarine telecommunications' market, small-scale projects are ever-present as we strive to connect the world through our existing transoceanic systems.

The early development and planning of each aspect of a small-scale project proves invaluable in its' effort to increase efficiency and improve relationships between the customer, contractor and end user. One must consider a straight forward, adaptive approach, while encountering the same constraints of a large system undertaking.

A key factor is to establish and ensure consistency in Project Management and Cost Control standards throughout a Company and to avoid the need to re-establish such procedures and controls at the beginning of each project.

1 DISCUSSION

This overview highlights the control of a company's Project Management and Cost Control activities from receipt of an RFQ through handover from the Commercial Department to the Project Management Team to the time at which a company's responsibilities and obligations towards the Client are discharged in full.

The significant affects of environmental concerns, permitting/customs/immigration, the interaction of the project's local neighborhood intertwined within a smaller scale (and budget) project can be detrimental to its' usual short timeframe and schedule. A basic structure for methodology and cost control will alleviate any repeating concerns for project team members. In addition positive examples of specific PM interaction and relationship building will help inspire new problem solvers and provide further structure and techniques for management to use. Recalling a settlement, deal or solution with a repeat customer will assist to formalize your bid, finalise the contract or aid the ops manager in the field.

The Project Management structure for a given project shall be clearly defined at the outset of the Bid Phase. Depending on the size and complexity of a project and the risk exposure, the Project Management Team shall include sufficient personnel to ensure the project can be controlled and administered in strict accordance with the procedure in place.

When dealing with small scale projects, the Management structure can be broken down to a single point of contact, that handles the customer liaison with knowledge of the site and just as important, has a relationship with the local people, end users, sub contractors etc.

In some cases, the Project Manager might fulfill a number of the roles, while for other more complex projects; specialists will be assigned different portions

of Project Management, in support of the Project Manager. A paramount condition for the successful implementation of your project methodology is for the Project Manager to be kept fully abreast at all times of all expenditure incurred against the project.

This method proves invaluable in cases where the main contract with the Client is broken down for each aspect of a turnkey system - one PM per supplier, whether subcontracted all to one company, or all different companies subcontracted to one client. Each sub needs to be kept aware of the others schedule and its affects one their element of the project. One lead PM or PM director, who liaises with the client works well for credibility, last stop for information and the always-critical overall (daily) financial picture.

The Director of Projects in conjunction with the Project Manager shall be responsible for the progress, financial tracking and reporting. As well, interfacing as required with the Contract Manager, the Operations Director, the Project Manager and Bid Manager (if not the Project Manager) to clarify any commercial, technical and/or financial details from the Bid Phase, which may remain outstanding on Contract award, is an integral part of the Director of Projects mandate. By reviewing and approving the cost control methods and budget allocations proposed by the Project Manager, the projects' Director will monitor major work elements in the Contract.

The responsibilities of a Operations Director with regards to project control shall include, in conjunction with the Director of Projects, nominating the Project Manager and ensuring through the Project Manager and in conjunction with appropriate Line Managers, that adequate control procedures are in place, thus providing adequate instructions to all project personnel for performing the work scope.

In many cases for the small system install, e.g. barge operations, it is a good idea to have the PM onsite.

Whether the PM contributes to the actual work, or simply acts as liaison to the client Rep, the advantage is that the PM witnesses all outcomes of the project's ops. Next time the PM helps with the bid, or contract or defends his/her MOP or cost to a Client, 1st hand knowledge is ever-present.

The responsibilities of a Project Manager shall include, without limitation, during the Bid Phase, acting as Bid Manager to lead the Bid or alternatively participating in the preparation of the Bid, participating in the recruiting and interviewing of the Project members and other project personnel. This ensures adequate resources and proficiency of personnel are in place to manage the project, in conjunction with applicable Line Managers, while allocating responsibilities to Departments providing support services to the Project Manager. In regards to relationships, the Project Manager, in conjunction with the Contract Manager, shall establish and maintain good Client relations and communications, advising on technical and contractual (in conjunction with the Contract Manager) queries of his/her personnel and creating the necessary interface with the Client to expedite queries.

On site with the Environmental Rep, the local land owner or fishermen, during some portion of the work establishes a positive atmosphere throughout the project.

It can be a major benefit for smooth operations, especially when they need to happen in a matter of a few days (in small scale installs), to be hiring / using local resources, hosting landing parties, involving media, Councilmen, etc. Even if internal resources could get the job done, it doesn't hurt to save on travel and living, minimizing your staff to only a rep / supervisor and having the local diver do the work, or the local fish boat act as a guard boat.

A Contract Manager can alleviate legal issues with expertise and responsibilities during the Bid Phase, upon Contract award, leading the contract negotiations with the Client as well as with any Subcontractors (in conjunction with the Project Manager), in order to ensure continuity between the terms and conditions of the Main Contract with those of Subcontracts and Purchase Orders (POs), and during implementation of the Contract.

If the Project Manager nominated is not the Bid Manager, he/she shall nevertheless form an integral part of the Bid Team and shall be consulted on and kept abreast of every aspect of the Bid as it is developed. This involvement on the part of the Project Manager shall carry over into eventual contract negotiations resulting from the Bid, thus ensuring the smooth hand over of the Contract to the Project Manager for subsequent implementation.

It is important to know the site at time of bid. Although it has been argued that small scale projects do not afford the time or dollars to afford this site visit, seeing a rock cliff landing, meeting a disgruntled owner with demanding remedial efforts required, learning of the current, ice formations and tidal affects on a certain bay / shore end or discovering sand dunes, eel grass or bylaw permits required at a beach / park will save you time, money and hassle in the end. On occasion, a landing site is changed last minute, even 500m can affect your project introducing a new land owner/border, a new rock outcrop / requirement for new inshore survey, or a failure in directional drilling with new landing procedure required. Having plan a-d in mind and all the related acknowledgements in place reduce lost time and money.

A contract review shall be conducted by the Contract Manager, in conjunction with the Project Manager prior to Contract signature to ensure documents are in line with the Bid and subsequent negotiations. The Contract Manager and the Project Manager need to debrief the Bid Manager (if not the Project Manager), Director of Projects, the Operations Director as well as other Management to explain the details of the Contract and seek required authorizations to execute the Contract.

During Contract implementation, the Project Manager shall, through the information process of project monitoring and control, project modification and performance analysis, monitor and address all aspects of the project.

At the outset of project, the Project Manager, with the project personnel, is required to conduct a generic risk management review. The purpose is to identify the risks, both internal and external, associated with each aspect of the forthcoming project phase and establish the manageability for each risk.

A great benefit to project cost and eventual learned project knowledge is having the opportunity to have PMs act as the QA rep after outlining such risk exposures.

While overseeing the project's QA, your PM can even multi-task providing Shore End assistance, Diver Supervisory, etc. It is easier for a Client to gain perspective, understanding, trust, what-have-you, when the liaison from the contractor, the PM can testify to doing, seeing and being involved with the work.

The Project Manager will, by discussion and consensus of opinion, complete this risk exercise and assign agreed priorities and promote the formation of an action plan assigning responsibilities and completion dates. The risks shall then be monitored for resolution by project control measures (such as: project meeting, planning meeting, safety action monitoring etc.).

No action or transaction having either a financial, scheduling, technical or contractual impact on the

project shall take place without full knowledge and prior approval of the Project Manager.

Its simple, if the PM doesn't know about the cost internally, the PM doesn't sign off on the expense. The onus is on the buyer to make the PM aware of material bought / labor hired.

Technical achievement shall be defined in a project Quality Plan. The project Quality Plan is required to identify key points at which steps will be or have been taken towards achieving a quantifiable technical objective. The project Quality Plan will introduce the dates upon which the milestones represented by each key point should be reached according to the project schedule.

As mentioned, a PM's observations in a PM role, can double as QA representation and act as a double check for ops / technical requirements, QA, SAE and contract wise.

The Contract Manager must keep the Project Manager informed, at all times, of the progress of negotiations of for any necessary Subcontracts (or PO's) as well as of any issues that arise in connection therewith. It is essential that all Subcontracts and POs be reviewed by the Project Manager for approval prior to execution.

The Contract Manager, in conjunction with the Project Manager, should represent their Company as the sole interface with Subcontractors during the negotiations and the adjudication process, involving other parties as required. Upon Contract award, the Project Manager and Contract Manager ought to agree with the Client a reporting and communication format to remain in place throughout the implementation of the project. The Project Manager will ensure a factual record is maintained of all claims against the Client whether they be by right of the Contract terms or caused by a breach of the Contract terms, thereby advising the Contract Manager.

Pre-operations site visits are highly focal to ensure, where practically possible, that the maximum information is collated and utilized for project personnel, and thus, to allow for familiarization before commencement of on site work. The Contract will likely require site visits or site meetings to discuss permits with local authorities, fishing associations, landowners, and end users per se, etc. Similarly, a desktop study, whether separate from the main Contract or as step one following contract signature will assist in addressing all system requirements. Route Engineers can process survey data for the cable types and quantities to be finalized and long-lead items procured (commencing manufacture). In some cases, a MOU will provide the catalyst for such manufacture start up, whereby armour types are added just-in-time to meet that part of the manufacture process.

A Project Review to ensure feedback of experience and documented evidence from project related activities and personnel is a valuable tool. The feedback shall be an additional means to ensure project knowledge and lessons learned are captured, documented and therefore available for the Company's future development. The Project Manager should be responsible for the reporting of project feedback and experience for the purpose of assessing performance in implementing the project, identifying areas of non-compliance that may have arisen, recommended improvements to methodology and equipment, actual against planned performance and causes of variances, as well as to identify areas of improvement in contractual conditions and actual costs against approved budget. In order to capture and communicate the lessons learned, it is essential that both the issue of the report and a review meeting be held as soon as possible after the completion of the Contract.

In regards to a Final Report, the purpose is to ensure a collective data record of project activities performed during the implementation of the project. The Project Manager must ensure that all project personnel understand the record keeping requirements of areas of the project for which they are responsible, the format in which the records shall be kept and presented and the timing for inclusion in the Final Report to the Client. It is highly effective to ask Project personnel to pass on experience gained and to communicate relevant information collected during the project to their respective Line Managers as well as to the Project Manager. Feedback of such experience shall be compiled by the Commercial Department and shall be utilized to develop future project/bid data to provide input for resources, scheduling etc.

Finally, a Project Close Out Report can help to assess performance in implementing the project, identifying areas of non-compliance that may have arisen, recommended improvements to methodology and equipment, actual against planned performance as well as to identify areas of improvement in contractual conditions and actual costs against approved budget.

2 CONCLUSION

It is critical to provide lit fibers for new systems, especially in first time markets, in the shortest time frame possible. Some critical factors in eliminating unforced delays and thus overall project intervals and risk have been addressed herein; however, it all comes down to a fast changing, adaptive, approach and the cooperation between the supplier and the client throughout.

Where necessary, explicit management controls and systems may be implemented to supplement this process to suit contractual requirements whilst providing a consistent basis for managing the various facets of projects. For example, key areas of concern

when addressing project interval reduction highlight: bid/contract stage, permitting, route surveying and engineering, manufacturing and procurement, installation and testing. On the fly decisions by the ops super or even better the PM (i.e. approval for expenditure onsite) improves one's chances of competing in the 'time-to-market' battle. For example, consider substituting cable staging, cable freighter for ship load, a PLGR tug for cable ship work, installing

PreLaid shore ends, inter-changing shore end / tester crews, having onsite divers for articulated pipe application in between landings, or having mobile gear onboard your cablesip for responsive offload and mobilizing of a vessel of opportunity.

There is no time to waste, nor any fisherman, regulation or landowner to overlook. Everything is on the critical path, every dollar counts and every relationship is fundamental.