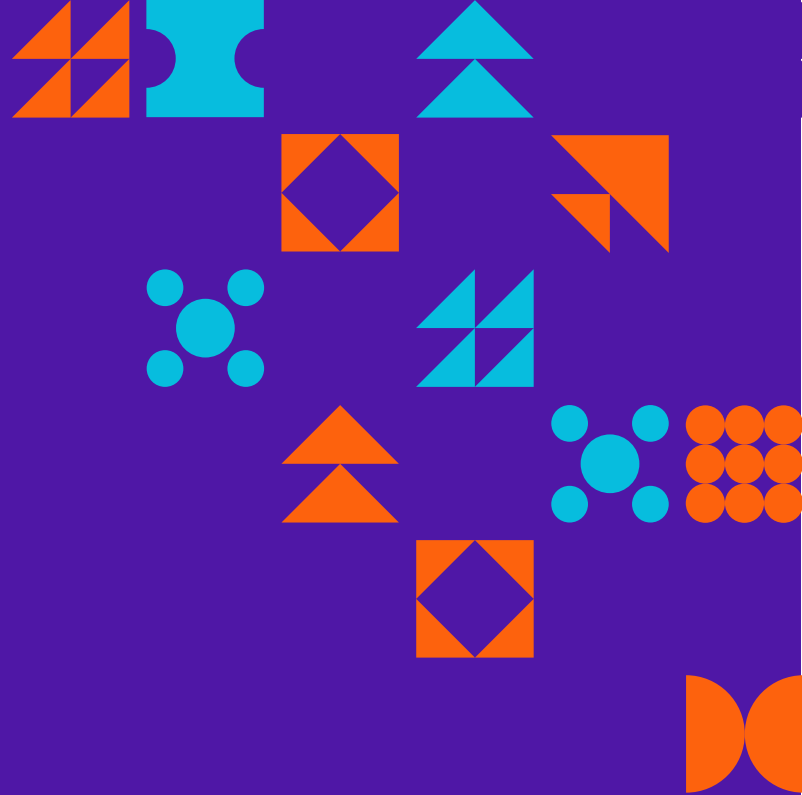




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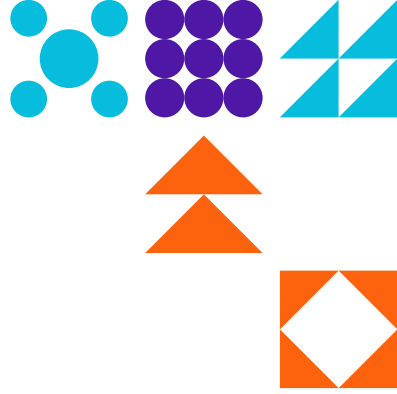
EPC Contracts; Owner and Bidders Prospective

By: Ammar Jahlan - Khaled Abumelha



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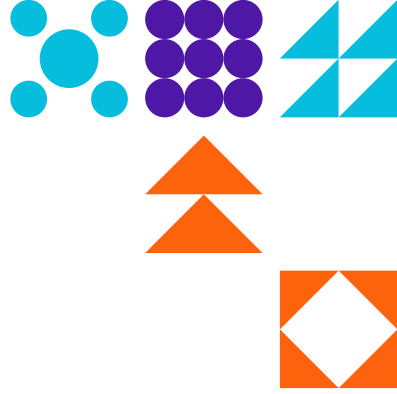


ABSTRACT

The preparation of a bid proposal is a pivotal function of Engineering, Procurement, and Construction (EPC) contractors, representing the critical bridge between project owners and the realization of development projects. This article explores the multifaceted approach that EPC contractors undertake when preparing bid proposals, highlighting the importance of strategic organization, comprehensive research, and effective communication. By examining the roles of initial owner efforts, the due diligence performed by bidders, and the final review processes facilitated by the owner, this article aims to equip project management professionals with insights that foster successful bidding outcomes.

INTRODUCTION

Bid proposal preparation is not a rocket science, yet an open-art that requires substantial due diligence from Bidder side. Bid proposal is more about communication than selling, more about value than price, and more about relationships than a contract. Throughout bid proposal preparation journey, both parties “Owner and Bidder” must be aligned on the required general and specific services to be delivered. Each organization has its own strategy for contract procurement and types of contracts where the method and strategy for bid proposal development is also vary for each type of contract. However, this article will focus on bid proposal preparation for Engineering, Procurement & Construction (EPC) type of contract. It will also touch base on the prework required to reach the bid proposal stage such as preparation of Request for Proposal (RFP), selecting the right bidders, bid review criteria and the prospective bidders’ due diligence. Besides, the article will illustrate on some of the post work needed from Owner side on the review of the forthcoming technical and commercial proposals.



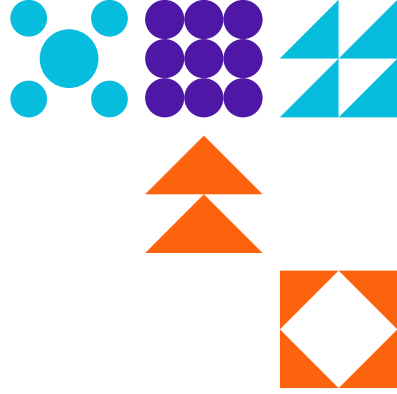
INITIAL OWNER EFFORTS

PREPARATION OF RFP

Preparation of RFP documents requires proper planning to address what Owner needs in terms of goods and services. It captures the contractual obligation and detailed scope of work (SOW) that Bidder should consider for proposal development. As such, the RFP document should clarify the essential elements of scope, time and cost, and any other special requirement to comply with specification.

As part of Owner due diligence of preparing the RFP, analyze and differentiate between the want and need list to be considered. The want is usually a desire for stakeholder or customers where it is not necessary to consider, whereas need list is crucial to meet the project objectives and essential for organizational success. The outcome of this analysis can be lumped into the functional and technical requirements of the project and addressed through the SOW. The objective of the SOW is to define the requirements in sufficient detail for Bidder to determine whether the requirement or service required is within his capability or not. Hence, SOW should cover all requirements to meet the objectives set by Owner, permits more accurate estimate of potential cost, address what is required without any uncertainty, refer Bidder to applicable specifications or standards, clarify Bidder responsibilities and identify standard of performance.

The flow of information and outline of RFP document is also a key factor to have clear communication of project requirement to ease Bidder understanding. The sequence of RFP should follow:



● **SPECIFIC INSTRUCTION TO BIDDERS:**

Introduction	Point of Contact	Validity of Proposals
Invitation for Proposals	Invitation for Proposals	Bid Closing Date
Job Explanation Meeting	Submission of Proposals	Currencies of Bid & Payments
Questions During Bidding	Conformity of Proposals	Performance Guarantees
Conflict of Interest	Government Liaison	Procurement of Materials

● **PREPARATION OF TECHNICAL PROPOSALS:**

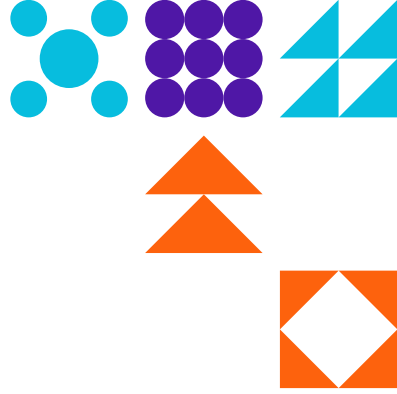
Introduction	Organization Charts	Validity of Proposals
Major Technical Considerations	Preparation of Bids	Bid Closing Date
Bidder's Work Plan Narrative	Submission of Proposals	Currencies of Bid & Payments
Forecasted Man-hours	Conformity of Proposals	Performance Guarantees
Personnel Resumes	Government Liaison	Procurement of Materials

● **PREPARATION OF COMMERCIAL PROPOSALS:**

Commercial proposal to be submitted in specific format based on Owner need
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● **PREPARATION OF TECHNICAL PROPOSALS:**

Introduction	Organization Charts	Validity of Proposals
Major Technical Considerations	Preparation of Bids	Bid Closing Date
Bidder's Work Plan Narrative	Submission of Proposals	Currencies of Bid & Payments
Forecasted Man-hours	Conformity of Proposals	Performance Guarantees
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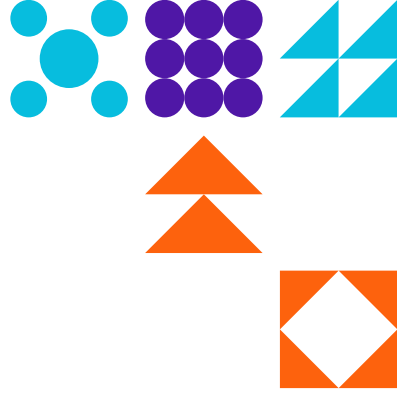
- **RFP QUALITY:**

It is essential for the Owner to ensure that the RFP is fully developed and ready for issuance to the Bidders. Based on interviews with 12 US contractors, “unclear contract documents” was one of the factors that cause contractors to increase contingency markups in bids. A questionnaire study of 19 contractors in Australia identified “quality of tender documentation” as the third most significant factor influencing a contractor’s decision to bid for a job. Another questionnaire survey of 32 contractors in Singapore found that out of 40 factors influencing bid/no-bid decision of contractors in Singapore, “completeness of tender documents” was the eighth most important. (Ashworth, A., & Hogg, K. (2000). Quality of tender documents: Case studies from the UK. University of Reading.

BIDDERS SELECTION

The prequalification process is a key factor in ensuring that only qualified Bidders are invited to submit bids. The selection criteria may vary depending on Owner specific needs. However, the following should be taken into consideration when prequalifying potential Bidders.

- **Experience:** Bidder track record with similar projects.
- **Technical Expertise:** Assessment of Bidder capabilities in meeting the technical requirements of the project.
- **Financial Stability:** Assessment of Bidder financial health and capability of managing the project’s financial demands without risking delays or failures.
- **Legal and Contractual History:** Assessment of Bidder history with legal issues, disputes, and their reputation in honoring contractual agreements.



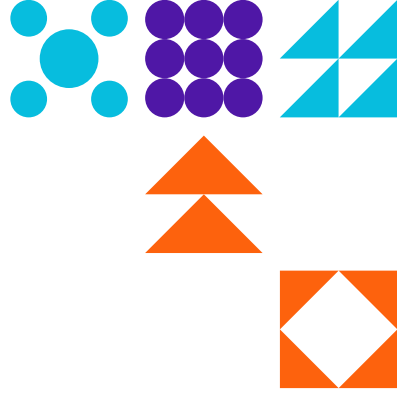
BUILDING BID REVIEW CRITERIA

The bid review program (BRP) establishes the bid review criterion followed by Owner when evaluating submitted proposals. Developing a clear and effective bid review program is vital for Owner to objectively evaluate and compare submissions. Similarly, the bid review program may also vary depending on Owner specific needs. It mainly includes:

- **Technical Acceptability:** to establish Bidder's understanding of the SOW and determine if the technical proposal meets the requirements of the SOW.
- **Compliance:** to the technical proposal requirements listed in specific instructions to bidders (SIB)
- **Cost:** Consideration of pricing submitted in the commercial proposal
- **Project Timeliness:** The feasibility of the proposed project timeline

TERMS & CONDITIONS

The terms and conditions outlined in the Request for Proposal (RFP) are essential for ensuring that both the project owner and bidders are clear on their respective responsibilities and obligations. These terms form the contract framework, which will eventually guide the final agreement between the contractor and the owner. Having well-defined legal and contractual terms in place is crucial to protect both parties' interests throughout the project.



• **THE TERMS & CONDITIONS USUALLY INCLUDE:**

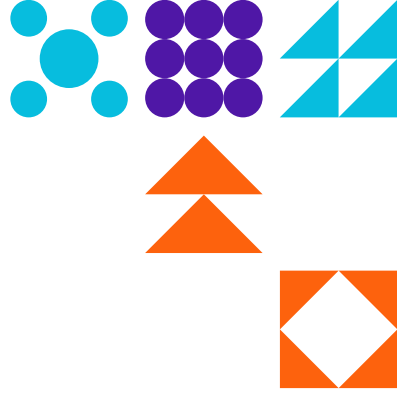
Contractor Obligations	Conflict of Interests
Owner Obligations	Dispute Resolution
Changes	
Payment Terms	
Liabilities	

Each of these terms and conditions is fundamental to fostering a clear, professional, and fair working relationship.

DUE DILIGENCE OF BIDDERS

ALLOCATION OF THE RESOURCES

The clock starts ticking as bidders receive the RFP, with a stopwatch in hand and an approaching deadline ahead. Preparing a bid proposal is a resource-intensive process that requires strategic planning and optimal resource utilization. As the bidding process unfolds, it's essential for the team to work in harmony, with each member playing a specific role. The process begins with the Project Management Team, which takes on the critical role of aligning the technical approach with realistic project timelines and cost projections. Their responsibility is to ensure that the bid is not only technically sound but also achievable within the project's timeframe and budget. Once the foundational structure is set, the Engineering Department steps in to handle the technical aspects. They thoroughly develop the design and ensure that the proposal adheres to the project's scope of work while maintaining high-quality standards. The engineers also consider potential challenges and offer innovative solutions to meet or exceed the owner's expectations. Simultaneously,



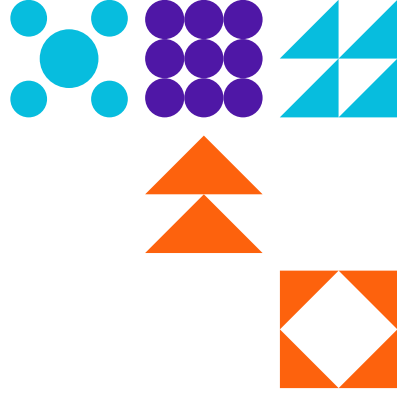
the Procurement Department is busy working on identifying suppliers and subcontractors who can provide competitive prices while maintaining a reliable supply chain. Their efforts ensure that the bid's cost estimates reflect the best possible pricing for materials and services, with an emphasis on timely delivery and quality. Lastly, the Legal and Financial Teams play a crucial role in ensuring that the bid meets all legal requirements and adheres to the owner's standards. They work to assess financial risks, create a solid financial proposal, and include contingencies for any unforeseen challenges.

TECHNICAL PROPOSAL PREPARATION

The technical proposal stands as the cornerstone of any successful bid, embodying the Bidder's strategy and capability to execute the project as outlined in the RFP. It's where the Bidder demonstrates not just their understanding of the SOW but their ability to deliver it effectively and efficiently. Central to this proposal is the Methodology, Bidder showcase his plans to carry out the work. This includes outlining the specific steps and processes, while also introducing innovative methods or technologies as applicable and feasible if it can improve the project's execution.

Another critical element is the Timeline, which lays out a clear, realistic schedule for the project. This timeline should be carefully developed, showcasing key milestones and critical paths, while also incorporating contingency plans to account for potential delays or unforeseen challenges. A well-structured timeline not only assures the Owner of the Bidder's organization but also provides transparency into the project's expected progress.

It is also crucial to include the qualifications of the key personnel who will play a direct role in the project's execution. It is essential to showcase the experience and expertise of the team members, ensuring to the project Owner that the right people will be in place to oversee the project's various stages. Bidder should outline the roles of key personnel, their responsibilities, and how their individual contributions align with the project's objectives.



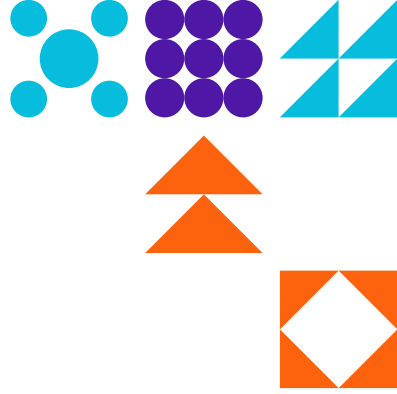
Finally, the Compliance and Quality Assurance ensures that the proposed plan adheres to regulatory requirements, safety standards, and environmental considerations. The Bidder must demonstrate a commitment to maintaining high-quality standards throughout the life of the project. Altogether, the technical proposal is the Bidder's opportunity to show their competence and preparedness, providing the project Owner with confidence that they can successfully execute the project as envisioned.

COMMERCIAL PROPOSAL PREPARATION

When preparing a commercial proposal, Bidders begin by identifying direct costs, such as labor, materials, equipment, and subcontractor services, and assess indirect costs like overhead, administrative expenses, and management fees. Contingency costs are factored in to cover unforeseen risks, such as delays, price fluctuations, or scope changes, with a typical contingency percentage ranging from %5 to %15. After calculating all costs, bidders add a profit margin, depending on project complexity, market conditions, and the level of risk involved. They may also adjust their pricing strategy to remain competitive or emphasize added value, such as innovative solutions or sustainability efforts, to justify higher pricing. Ultimately, the commercial proposal aims to balance competitiveness with profitability while ensuring the project's financial feasibility.

BID PROPOSAL SUBMISSION

As the submission deadline or Bid Closing Date approaches, the final critical step is to compile the complete the bid proposal. Every detail matter, as this proposal serves as the first impression of their capability to manage and execute the project. One of the most important considerations when finalizing the bid is the Compliance with Submission Guidelines and Timelines. Bidders must adhere to any specific submission instructions outlined in the SIB.



Whether it's the required number of copies, the file format, or the specific documentation that needs to be included, failure to comply with these guidelines can result in disqualification or delays in the review process. Being meticulous about these details demonstrates respect for the Owner's processes.

FINAL OWNER EFFORTS

TECHNICAL PROPOSAL EVALUATION

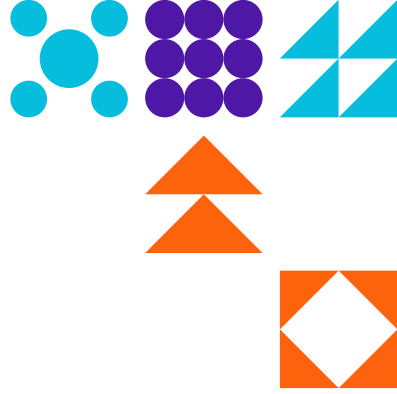
It is an exciting time; the Owner has received the proposal bids. The bid review team is eager and rushing to start the next phase. The bid review team will follow the established criterion to evaluate and assign scores to each proposal, which allows for objective comparisons between bidders.

COMMERCIAL PROPOSAL EVALUATION

After the evaluating the submitted technical proposals, the attention shifts to commence the evaluation of the commercial proposals of the technically accepted proposals. Each organization has its own procedure in evaluating the commercial proposals. However, it is recommended to analyze the commercial proposals not just based on the raw numbers, but also in the context of the proposed project execution methods to ensure the financial viability. And, to do the financial due diligence to assess whether the proposed costs reflect realistic market trends and account for necessary risk contingencies.

AWARD

After thoroughly evaluating both the technical and commercial proposals, the final step is to award the contract. All bidders are notified of the outcome, with feedback provided to those who were not selected. Prior to awarding and as a final step the Owner will start the contract negotiations with the chosen bidder.



RESULTS & DISCUSSIONS

ISSUING A QUALITY RFP PACKAGE

One of the primary pain points in bid proposal development is the status of the received Request for Proposal (RFP) package. When an RFP package is issued prematurely or with poor quality, it can lead to inaccurate estimates, higher margins in bids, claims and disputes. As a result, Bidders will submit proposals based on assumptions, leading to discrepancies in pricing, scheduling, and technical proposals, and ultimately reducing the overall quality and competitiveness of the bids.

BALANCING COMPETITIVE PRICING WITH VALUE PROPOSITION

Another significant challenge is creating a commercial proposal that is both cost-competitive and offers value. Bidders must balance the desire to be the lowest bidder with the need to demonstrate added value, quality, and innovation and more importantly the desire to profit from the project.

ADDRESSING THE COMPLEXITY OF COMPLIANCE AND LEGAL TERMS

Bid proposals often fail to account for the legal and contractual complexities inherent in large-scale projects. Navigating payment schedules, penalties for delays, and compliance with regulatory requirements can be overwhelming and time-consuming. It is critical for Bidder to involve the legal and financial teams in the process to review and ensure all terms and conditions are clear and realistic.