TENDERING PROCESS
WINNING PROPOSAL

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October 2010
Tendering Process - Winning Proposal

- Just like project work, a proposal must be managed.
- But, proposals have to be delivered in a much shorter time period.
- Key persons must take full responsibility for the execution of their work share.
- The best and most experienced people must contribute to a winning proposal.
Tendering Process - Winning Proposal

Major Product Phases of a Space Program

SCR - System-Concept Review
SSR - System-Specification Review
PDR - Preliminary Design Review
CDR - Critical Design Review
FACI - First Article Configuration Inspection
SPR - System Production Review

A: CONCEPT-PHASE
B: DEFINITION-PHASE
C/D: DEVELOPMENT AND PRODUCTION PHASE
E: OPERATIONS PHASE
F: DISPOSAL PHASE
Customer Responsibility

- Definition of Project Goals
- Issue of System Specifications
- Preparation of Invitation To Tender (ITT)*
- Invitation of Potential Contractors to Bid
- Preparation of Proposal Evaluation Scheme
- Implementation of Proposal Evaluation Team
- Performance of Proposal Evaluation
- Preparation of a Short List
- Selection of best Bidder
- Performance of Contract Negotiation
- Sign Contract with selected Contractor
- Start Project with Kick Off Meeting

*Note: ITT is a typical ESA Term – often also the Term Request for Proposal (RFP) is used
Typical ITT Structure

- Invitation to Tender (ITT)*
- Bidders guideline
  - Delivery Instructions
  - Preparation Instructions
- Technical Requirements
  - SOW,
  - System Specification
  - Interface Specification's
  - Instructions for Preparation of Plans
    - R&D,
    - MFG and
    - AIT

* Alternatively called Request For Proposal (RFP)
Typical ITT Structure

- **Product Assurance Requirements**
  - Quality
  - Reliability
  - Safety

- **Management Requirements**
  - Project Control
  - Documentation & Configuration Control
  - Information Management

- **Commercial Requirements**
  - Price Type
  - Payment schedule

- **Draft Contract**
  - Terms & Conditions
Bidder Responsibility

A) Pre - Proposal Activities

- Obtain Pre - Information:
  - Study Documents,
  - Customer Plans,
  - Budget Information, etc.

- Establish Customer Contact Plan
- Identify Potential Proposal Leader
- Identify Key Proposal People
- Identify Potential Subcontractors / Vendors
- Prepare Draft Proposal Guideline
Bidder Responsibility

B) Proposal Activities (I)

- Receive, Copy and Distribute ITT Documents
- Initial Bid / No-Bid Decision
- Analyze Major ITT Requirements
- Prepare Competitive Analysis
- Establish Cost Targets (CTs)
- Compare CTs with Customer Requirements
- Final Bid / No-Bid Decision
- Prepare Proposal Breakdown
- Prepare Proposal Scenarios
- Appoint Proposal Leader & Volume Captains
- Issue Final Proposal Guideline
Bidder Responsibility

B) Proposal Activities (II)

- Implement and Brief Proposal Team
- Perform Proposal Kick Off Meeting
- Assign Responsibilities (Volumes, Chapters, etc.)
- Prepare Proposal Scenarios (Story Board)
- Prepare / Provide Proposal Inputs
- Perform Proposal Reviews (Red Team, Blue Team)
- Prepare Proposal Documentation:
  - Text, Tables,
  - Diagrams,
  - Pictures,
  - Cover Page
- Proposal Production and Finalization
- Proposal Submission to Customer
Bidder Responsibility

C) Post - Proposal Activities

• Provide Proposal Stand-by Personnel
• Provide Answers to Customer Questions
• Attend Contract Negotiations (if selected)
• Sign Contract with Customer

• Prepare for Project Kick-Off Meeting
Go-/No-Go Decision

- As sooner you realize that you’re spinning the wheels, as more money you may save for another projects.
- How do you know if you are working on a looser?
- Review the RFP and look for any issue you’ll have a problem answering.
- Try to get clarification if anything is questionable.
- Therefore, apply the GO/NO-GO checklist.
- The most profitable thing you can do is not to enter into a business you do not want.
Go-/No-Go Decision Process

- Customer Requirements
  - Product/Services
  - Delivery Time
  - Price
  - Market Prices
  - Competition
  - Legislation
- General Boundary Conditions
  - Technology
  - Assets
  - Financing
- Technical/ Economical Know How
  - Manpower
  - Facilities
  - Financing
- Company Resources
- Proposal Pre-Analysis
  - Winning Chances
    - Competition Analysis
  - Price Assessment
  - Company Strategy
  - Proposal Budget
- Bidding Strategies
  - Detailed Analysis of Customer’s Requirements
  - Potential Objectives of Competitors
  - Evaluation of Companies own Potentiality
  - Development of Profit-oriented Proposal Plan

Approval of Proposal Budget

Appointment of Proposal Team

Appointment of Proposal Manager

No Offer
## GO-/NO-GO Checklist

<table>
<thead>
<tr>
<th>Checklist Criteria</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>1. Is there a real project requirement?</td>
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<td>2. Is the relationship to the customer positive?</td>
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<td>Are their business connections from previous contracts?</td>
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<td>3. Can the bidder satisfy the customer concerning workload and heritage?</td>
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<td>4. Will the project create future work for the company?</td>
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<td>5. Is the budget sufficient that the customer has in mind?</td>
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<td>6. Has the bidder worked with the customer before?</td>
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<tr>
<td>Checklist Criteria</td>
<td>Yes</td>
<td>No</td>
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<td>7. Is the customer’s selection procedure known to the bidder – are the decision makers known?</td>
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<tr>
<td>8. Is the relationship with customer positive – are their business connections from previous contracts?</td>
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<td>9. Can bidder offer special feature to the customer?</td>
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<tr>
<td>10. Is the bidder committed to fund the proposal effort?</td>
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<td>11. Can the bidder staff the proposal effort effectively?</td>
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<td>12. Has the bidder identified all black holes?</td>
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THE COMPELLING QUESTION TO BE ANSWERED BY THE MAIN PROPOSAL STRATEGY AND SUPPORTING THEMES IS:

WHY US?
Tendering Process - Winning Proposal

1. Appointment of Proposal Manager
2. Appointment of Proposal Team
3. Approval of Proposal Budget
4. Detailed Evaluation of RFP
5. Proposal Preparation: Plan
6. Proposal Organization & Allocation of Personnel
7. Clarification with Customer
8. Detailed Proposal Structure & Scenarios
9. Proposal Preparation Prime-Co
10. Proposal Preparation Sub-Co’s
11. Final Proposal Integration

- Volume
- Chapter
- Section
- Scenarios

Involvement of Sub-Co’s
Common Proposal Management Problems

- Senior management re-writes the proposal at the red team review.
- Proposal managers change the proposal schedule.
- Technical experts are ignored.
- Contract people have not been included.
- Reviewers don’t keep to the schedule required for reviews.
Proposal Process (End to End)

**Tendering Process - Winning Proposal**

**Proposal Process**

- **Identify Opportunity**
  - EST, PROP.MGR AND TEAM
  - STRATEGY TO WIN
  - CUSTOMER CONTACT PLAN
  - CUSTOMER NEEDS
  - PRICING STRATEGY
  - TEAMING/SUBCONTRACTING
  - BASELINE DESIGN
  - KEY TECHNICAL ISSUES
  - RESOURCES REQUIREMENTS
  - COMPETITIVE ANALYSIS
  - RISK/SCHEDULE ANALYSIS
  - POLICY/POSITION PAPER
  - PROPOSAL DIRECTIVE
  - DRAFT PROPOSAL
  - FIRST CUT COSTS

- **Pre-Proposal Activity**
  - RECEIVE RFP
  - PROPOSAL PLANNING
    - RFP REVIEW
    - INSTRUCTIONS
    - FINALIZE PROP. ORG.
    - PREPARE FOR KICK OFF MEETING
  - KICK OFF
    - EXECUTIVE SUMMARY
    - TECHNICAL VOLUME
    - MANAGEMENT VOLUME
    - COST VOLUME
    - RED/RISK TEAM REVIEWS
    - LEGAL REVIEW
    - BOX, PACK, SHIP
  - Submit Proposals ORALS
  - Post-proposal Activities
    - MARKETING/STRATEGY
    - TECHNICAL CLEANUP
    - SITE SURVEY
    - PRICING-BEST AND FINAL
    - MAINTAIN BASELINE
  - Win
    - NEGOTIATE (MAYBE)
    - LESSONS LEARNED
    - PERFORM

**LEGAL ... AND FINAL MAINTAIN BASELINE FINALIZE PROP., ORG. MANAGEMENT VOLUME SITE SURVEY LESSONS LEARNED PERFORM ORALS**
Typical Proposal Structure

• Cover Letter & Commitment

• Volume I - Executive Summary
  • Overview
  • System Approach
  • Management Approach
  • Options
  • Project Schedule
  • Organisational Approach
  • (usually no prices are shown in this Volume)
Typical Proposal Structure

- Volume II – Technical Proposal
  - Requirements Analysis
  - Proposed Technical Solutions
    - Design & Development Approach
    - Manufacturing & Test Approach
    - Assembly, Integration & System Verification
    - General System Parameters
  - Detailed Project Schedules
  - Technical Project Plans (Attachments)
    - Design & Development Plan
    - Manufacturing Plan
    - Test & Verification Plan
    - Procurement Plan
Typical Proposal Structure

• Volume III – Management Proposal
  • Proposed Project Organisation
    • Industrial Team
    • Company Presentation
    • Project Team
  • Proposed Key Personnel
  • Proposed Management Procedures
  • Proposed Management Information
  • Summary of Industrial Heritage
  • Management Plans (Attachments)
    • Project Management Plan (PMP)
    • Overall Project Schedule
Typical Proposal Structure

• Volume IV – Commercial Proposal

  • Acceptance/Comments to Contract
  • Acceptance/Comments to SOW
  • Price Proposal (FFP, FP, CR, as applicable)
  • Price Index (if applicable)
  • Payment Schedule
  • Incentive/Penalty Proposal
Sample Proposal Organisation

Tendering Process - Winning Proposal
Sample Proposal Organization

- Executive Volume I
  - Introduction
  - Compliance Matrix
  - Engineering
  - Management
  - Cost
  - Legal
  - Cover Letter

- Engineering Volume II
  - System Engineering
  - Subsystems
  - Product Assurance
  - Integration
  - Test

- Management Volume III
  - Management Plans
  - Schedules
  - Controlling
  - Documentation
  - Reporting

- Cost Volume IV
  - Cost Analysis
  - Cost Estimates
  - Pricing Structure
  - Payment Plans
  - Financing

- Proposal Integration
  - Proposal Guideline
  - Layout/Structure
  - Edition
  - Copy & Printing
  - Shipment

Tendering Process - Winning Proposal
Proposal Preparation Instruction

- Table of Content
- Page Allocation & Limitation
- Proposal Schedule & Milestones
- Proposal Organisation
- Appointment of Proposal Manager
- Appointment of Volume Leaders (Captains)
- Appointment of Contributors
- Typing Instructions/Templates
- Drawing Formats
- Reviews (Red Team & Blue Team)
- Submittal Requirements
Red Team Review

- Red team members should emulate the membership of the customer selection team.
- The red team looks at the proposal through the customer's eyes.
- Ideally the red team members have not had prior connection to the proposal – they should be neutral.
  - They should not have contributed to proposal writing.
- The Red team review should be the most comprehensive review the proposal gets.
Red Team Review

The red team review determines one last time the following:

• If the themes are clear and evident.
• That the benefit statements appear in every part of the proposal.
• Drawings an art work make sense and fit to text.
• The proposal responds to the guidelines.
• The text is easy to read and understand.
Red Team Review

- Ideally the final draft should not have much modifications from the red team review.
- However, if last minute intelligence may generate new data, some modifications may have to be made.
- Important material are for example:
  - Executive summary
  - Technical
  - Management
  - Commercial
  - Compliance matrix
  - RFP check list
Cost Proposal

- Also the preparation of cost proposals must be scheduled AHEAD of the rest of the proposal.

- Three trapdoors in cost proposals:
  - Not giving the customer what he has asked for in the RFP.
  - Providing the customer with information he has not asked for
  - Not following the RFP instructions

- The green team review – cost review
  - The cost proposal should be prepared by the person who will manage the project.
  - A NO-GO is always better than a project one cannot manage profitably.
Pricing and Payment Strategy

- Fixed Price with Escalation (FP)
- Firm Fixed Price (FFP)
- Cost Reimbursement (C+)
- Cost Reimbursement with Ceiling (C+ FF)
- Cost Sharing
- Incentive and Penalty Clause
- Other Price Conditions
- Development of Payment Plan
Debriefing after Proposal Delivery

- **Objective**: to learn a lesson about anything that didn’t work well, so that it doesn't become a threat at the next proposal.

- A good debrief not only identifies the problems, but also identifies measures to avoid them in the future by adjusting and improving the proposal preparation process.
Contract Implementation and Follow-Up

- Fully Negotiated Contract
  - Agreed Specification
  - Agreed Statement of Work (SOW)
- Kick-Off Meeting
- Progress and Status Control
- Project Reporting
- Project Reviews
- Project Management Meetings
- Project Completion (System Acceptance)
Recommended Project Management Literature

- Madauss, Projektmanagement, 6th Edition, 2000, German
- Verzuh, The Fast Forward MBA in Project Management, 1999
- Terry, Principles of Management, 7th Edition
- ESA, Space Project Management, ECSS-M