



Center of Naval Shipbuilding Technology
CNST Proposal Guide
Project Plan

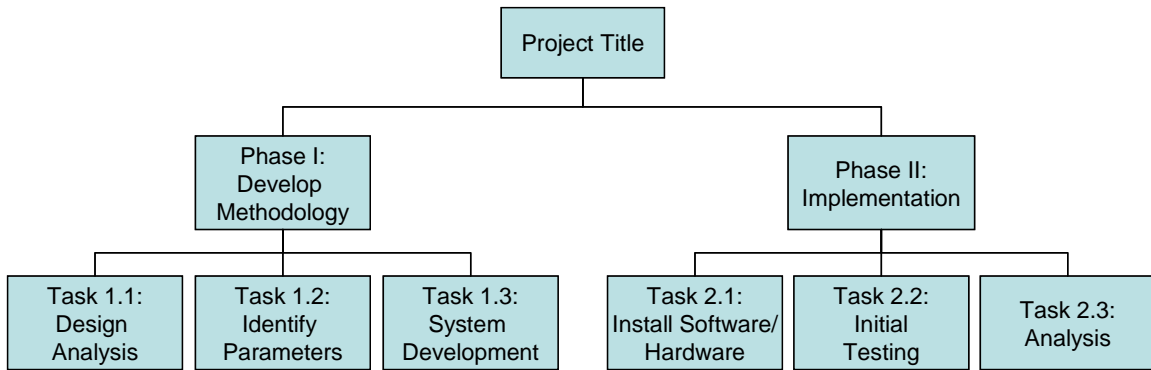
Format/Instructions

- 1. Date:**
- 2. Project Title:** Title of proposed project (from Issue Sheet, if applicable).
- 3. Cost:** Budgeted cost, per year for each year of the proposed project.
- 4. Affected Program Office:** The SYSCOM program office(s) supported by the proposed project.
- 5. Performing Activity:** Project Team Members (company/research institution).
- 6. Performing Activity POCs:** Technical and Contracting Points of Contact for the Project Team Leader (include name, address, phone, fax and email).
- 7. Background and Need:** Discuss the manufacturing technology need and why a Navy ManTech program approach is required to satisfy that need. Describe the present manufacturing/repair process, the requirements that are not being met, and the improvements needed. Include specific examples of money, time, and material expenditures that need to be reduced in order to arrive at a more productive utilization of the affected resources.
- 8. Solution:**
 - a. Summary.** Enter a concise statement that describes the purpose to be achieved by conducting the project. This statement should briefly describe the proposed project in terms of establishing improved manufacturing or repair processes, methods, or equipment for the production of defense material. Describe the new or improved process, method, or equipment that will be demonstrated, and when implemented, will satisfy the manufacturing technology need discussed in paragraph 7. Indicate whether the new technology to be demonstrated has been proven feasible through research and development or extrapolation using existing technology.
 - b. Team Members and Their Roles.** Provide a summary table that identifies each project participant, their role and key contributions to the project, and their relative level of effort (as a percentage of total manhours) for the proposed effort. Use the following format to provide this information:

Project Participant	Role and Key Contribution	Relative Level of Effort
Shipyards 111		50% (for example)
Company 222		25%
Organization 333		15%
.....		10%
		100%

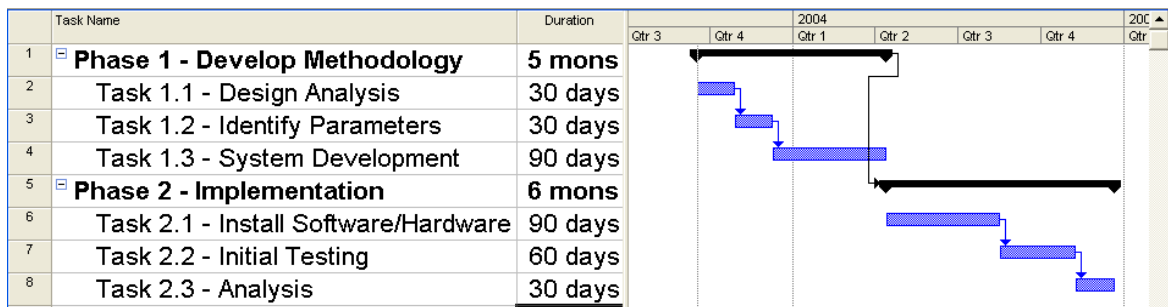
9. Technical Plan:

- a. **Statement of Work.** Provide a concise but complete statement of work for the project. Describe the work that is going to be performed and how this will satisfy the need addressed earlier.
- b. **Work Breakdown Structure.** It is necessary to define and organize project scope to effectively track performance. As such, a Work Breakdown Structure (WBS) that follows a hierarchical tree structure should be included. The WBS is not intended to be an exhaustive list of work. Rather, it should be a comprehensive classification of project scope. Each WBS should consist of three levels: (1) project, (2) phase, and (3) task. A sample WBS is shown below.



Although it is not necessary to provide a detailed, step-by-step description of the methodology proposed for achieving the desired results, a brief description of each task should be included to support the graphic. Additionally, ensure the level of detail provided in the cost proposal matches that of the WBS.

- c. **Schedule.** A high-level schedule is required that depicts the major activities and timeline required to meet project objectives. Provide each task identified in the WBS as a separate line on a Gantt chart style program schedule. Also include top-level project duration. An example chart is shown below.



Phases must be no longer than one year and must not overlap. However, phase length should not be arbitrarily set to the maximum duration. The phases should correlate with logical breaks in the technical effort for go/no-go decision points.

- d. Milestones/Completion Criteria.** Milestones are defined as “observable technical events” that mark the completion of a significant portion of the project. In this section, identify an appropriate number of milestones and criteria by which their completion will be determined. For projects with multiple phases, also identify the key metrics that will be used to make a determination to continue from one phase to another, or stop the project. Include a summary table in the format provided below.

	Milestone Number and Description	Completion Criteria	Metric for Go/No-Go Decision
Phase 1			Phase 1-to-Phase 2 Metric
Phase 2			N/A

- e. Goals & Exit Criteria.** As a means of tracking and monitoring project results, applicable process and/or product goals must be developed. These goals, and their corresponding metrics, thresholds, and targets should be summarized in tabular format. A sample table is shown below.

Process/Product Goals	Metric	Threshold	Target
Reduce Design/Eng. Labor	Design man-hours per year	0.5% Reduction	1% Reduction
Reduce infusion-related rework	Rework hours per hull	5% Reduction	10% Reduction
Accurately model infusion process	Predicted values vs. measured values	+/- 15% variation	< 10% variation
Avoid lost/damaged material costs	Material costs	2% Savings	5% Savings

10. Management Approach. Describe how the project will be organized and managed.

- a. Management and Technical Team:** This section should address the qualifications, capabilities, and experience of the proposed management team and technical personnel who will be assigned to carry out the project. Describe the past performance of the company or team members in carrying out similar kinds of efforts, including technology application, along with capabilities and relevant experience, previous or current relevant R&D work, and related contracts completed or in progress. Specifically, it should identify which tasks will be performed by which party, and why each team member/subcontractor, if any, was selected to perform its tasks(s). This section shall also identify shipyard involvement, Prime Contractor responsibilities, Team Member/Subcontractor(s) responsibilities, and any University or Other Support Effort. It should identify all key personnel. Provide resumes (no longer than 2 pages each) of key personnel in Appendix B. Provide solid evidence of commitment by team members. Letters of commitment should be included for key team member companies (these letters should be included as Appendix C. Describe any capabilities the team has that are uniquely supportive of

the technology to be pursued. Key facilities and resources for proposed effort should also be identified.

- b. Related Proposals and Projects:** Discuss any other proposals or projects that this proposal is dependent upon and/or related to and the specifics of any co-dependency. Clearly demonstrate offeror’s knowledge of other ongoing work, how the proposed effort differs from that work and how related efforts will be coordinated with or leveraged to support the proposed project.

11. Implementation Plan: Provide a well-defined plan that will support the transition of project results to the shipyard and identify the resources required to achieve implementation. CNST will incorporate the information provided into a standard format, which will be submitted to ONR for approval. Implementation Plans for projects with durations longer than 12 months will be reviewed and updated annually to ensure consistency with project objectives and schedule. The key points to include are:

- How and when the project results will be implemented in a production or repair facility. Provide a schedule that includes the major elements of: (1) the ManTech project, (2) implementation activities, and (3) the platform/weapon system production (top-level).
- Identify commitments from industry management representatives and users to implement the results.
- Specify how the implementation will be accomplished, e.g. production hardware or methods, specifications, standards, engineering change proposals, drawings, instructions, etc.
- Identify implementation requirements that must be conducted by others to achieve successful implementation. Include a table similar to the one below to indicate all the specific procurement, qualification, testing, certification requirements, and approvals that must be met. For each entry, the responsible entity should be indicated as well as an estimate of the resource commitment by that entity for that item.

Requirement	Responsibility	Resource Commitment
Equipment/Material		
.....		
.....		
Testing		
.....		
.....		
Qualification / Certification		
.....		
.....		
Approvals		
.....		
.....		

- 12. Software Development Plan.** Any proposal that includes software development must provide a brief (one page or less) outline of the development plan explaining the proposed functionality, approach, interoperability, and methodology.
- 13. Benefits Analysis/Business Case:** Discuss the business requirement that the proposed new technology and/or business process will address, and clearly demonstrate that there is a need for the technology/process. Discuss the breadth of applicability to the Naval shipbuilding industry, the level and nature of benefit to the Navy and industry, the potential for lead-time and cycle-time reduction, and any synergy with other operations, businesses, research, and programs. Also, the proposal should address the economic impact of the manufacturing technology and summarize cost avoidance estimates on a per hull basis. Provide additional detail regarding the anticipated payoff that would result from the project by estimating cost savings, by category (e.g. labor, materials, rework, etc.) and/or reduced cycle time for affected processes and procedures. Be as quantitative as possible and substantiate any and all assumptions used in the business case.
- 14. Technical/Design Reviews:** The contractor shall perform quarterly reviews. This section will describe the intended reviews and identify when and where they will be conducted.
- 15. Deliverables:** Specify the products that the Navy will receive during and at the completion of the project. Some examples of deliverables are process and manufacturing data, pilot production lines, special tools, special test equipment, quality control data, inspection aids to include production test techniques, test data, technical reports, and technology transfer media such as a video of the process. Specific deliverable requirements will be contained in the contract documents for each project. In addition, the following deliverables are required for all projects:
- **Quarterly Report:** A concise project status report, submitted via email to the Project Technical Representative and the CNST Business Manager. Reports are due by the 15th of the month following the end of a quarter (i.e., no later than January 15, April 15, July 15 and October 15). Each report must address the following:
 - **Accomplishments:** List major accomplishments in hard-hitting statements suitable for executive level presentations and public relations activities. When referring to specific deliverables, include the deliverable title (e.g., Interim Generic Report).
 - **Status and Issues:** Report whether the Cost, Schedule, Cost Share, Technical Progress and Deliverables are / are not on track. Include amplifying comments for items not on track.
 - **Technology Transfer Status:** Discuss technology transfer activities accomplished this quarter (e.g., workshops, presentations at conferences/panel meetings/symposiums).
 - **Actions:** Discuss actions planned / in progress to get project back on schedule, within cost, to resolve a technical or project team issue, etc.
 - **Plans for the Next Quarter:** List key activities and accomplishments planned for the coming quarter. Include technology transfer activities.
 - **Gantt Chart:** Provide a Gantt chart that shows current project schedule and progress for each task.

- **Go/No-Go Recommendations:** Before or at the end of each project phase the contractor will provide the Project Technical Representative documentation (by email) that supports a recommendation to continue or terminate the project based on the Completion Criteria and Go/No-Go Metrics described in 9.c.
- **Final Report:** A final report is required at the completion of the project, and must be submitted within fifteen days of the project end date. The final report will replace the last quarterly report due for the project, and should summarize the entire period of performance efforts and accomplishments. The final report should address the following:
 - **Accomplishments:** List major accomplishments in hard-hitting statements suitable for executive level presentations and public relations activities. When referring to specific deliverables, include the deliverable title (e.g., Interim Generic Report).
 - **Technology Transfer Status:** Discuss technology transfer activities accomplished during the entire project period of performance (e.g., workshops, presentations at conferences/panel meetings/symposiums).
 - **Implementation Efforts:** Describe where and how the results of the project have been implemented and plans for future areas of implementation. If there are no implementations or none planned, briefly describe the reasons for the decision to not implement.