#### NAVY MANTECH PROJECT PLANNING DOCUMENT

1. Date: 2. **Issue Number: Issue Title:** 3. 4. **Project Number:** 5. **Project Title:** Budgeted cost, per year for each year of the 6. Cost: proposed project. (e.g., PMS-500) 7. **Implementing Program Office:** 8. Weapon System Application: (e.q., DDG-1000) 9. **Component:** 10: **Program Office Representative:** 11. **Technical Assistant:** (Name, Title, Organization – NSWC, NAVSEA TWH, etc.) 12. Performing Activity: Center for Naval Metalworking (CNM) 13. Subcontractors: 14: **Performing Activity POC:** Dale Orren, CNM Deputy Director (COE's) c/o Advanced Technology International 315 Sigma Drive Summerville, SC 29486-7790 Phone: (843) 760-3587 Email: dale.orren@ati.org 15. **Subcontractor POC:** Name of POC (S/Y's)Organization/Company Address Phone Fax Email Subcontractor Champion/Sponsor Name Title, Department/Organization Address Phone Fax Email Implementation Funding Sponsor/Source of Funding Name Title, Department/Organization Address Phone Fax Email

# 16. Team Members

Identify the internal and external project team members, include management team and support organizations. An organizational chart with team member names, positions and roles is acceptable.

# **17.** Problem /Objective

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.

# 18. Solution

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. **Clearly describe the new or improved process, method, or equipment that will be demonstrated, and when implemented, will satisfy the manufacturing technology need.** Indicate whether the new technology to be demonstrated has been proven feasible through research and development or extrapolation using existing technology. In the case of 'unknown' new technologies, <u>discuss the factors that support Navy ManTech pursuit, specifically its technical applicability</u>. The project team should include project's objectives. An example is included for project team review.

Objective: Reduce real estate allocation process time								
Parameter	Baseline Value	Requirement Threshold Value	Requirement Objective Value	How to Measure	Date to be Achieved	Achievement Value	Achievement Date	How Demonstrated
Labor Hours	Cost of Labor for Current Activity	30% (1800 hrs)	50% (3000 hrs)	Conduct shipyard evaluations and document	End of Task 6	TBD (completed at project end)	TBD (completed at project end)	Comparison to baseline value
Objective: Incr	ease number of un	ts constructed und	der cover					
Parameter	Baseline Value	Requirement Threshold Value	Requirement Objective Value	How to Measure	Date to be Achieved	Achievement Value	Achievement Date	How Demonstrated
Labor Hours	Labor hours associated with Current Activity	20 Additional Units (9600 hrs)	30 Additional Units (14,400 hrs)	Conduct shipyard evaluations and document	End of Task 6	TBD (completed at project end)	TBD (completed at project end)	Comparison to baseline value
Exit Criteria: O	otain Approval to I	mplement for DDG	i-51					
Parameter	Baseline Value	Requirement Threshold Value	Requirement Objective Value	How to Measure	Date to be Achieved			How Demonstrated
DDG-51 Program Use	Meets existing requirements	Equivalent or better than existing design tool	N/A	Comparison of baseline to concept	End of Task 7			Installation
Exit Criteria: Provide the variants that identity schedule conflicts								

# **Process Goals and Technical Exit Criteria** (Example below)

Parameter	Baseline Value	Requirement Threshold Value	Requirement Objective Value	How to Measure	Date to be Achieved			How Demonstrated
User Availability	Schedule Conflicts	Automated Identification Process	N/A	Comparison of baseline to concept	End of Task 7			Variants Provided
Exit Criteria: A	Exit Criteria: Automated planning tool that reduces labor							
Parameter	Baseline Value	Requirement Threshold Value	Requirement Objective Value	How to Measure	Date to be Achieved			How Demonstrated
User Availability	Current Manual Process	Tool installed with user interface	N/A	Capacity Planning Tool compared to current process	End of Task 7			Tool Generates Product

### 19. Technical Plan

### a. Executive Summary

The Executive Summary allows offerors to present briefly and concisely the important aspects of their proposals to evaluators. The summary should present an organized progression of the work to be accomplished, without the technical details, such that the reader can grasp the core concepts of the proposed project.

- **b.** 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.
- c. 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 at a minimum consist of three levels: (1) project, (2) phase, and (3) task. Listing subtasks is recommended to aid in more detailed project scope definition.
- **d. General overview.** (*An example outline is provided below; the number of tasks varies by project*)

#### (1) Program Management

This task includes activities to initiate contracts, hold a project kick-off meeting, develop contract deliverables, and submit and status monthly financial and technical status.

# (2) Project Oversight and Management

Include the key facility project and program management/oversight functions to enable successful project completion and implementation. Therefore, a project manager will be assigned and each function listed will be the responsibility of the project manager.

**Phase I** (state length as xx months; <u>nominally a maximum of 12 months per phase</u>) Describe the Phase I work, key objectives and expected results. **Task 1** – include the task lead (organization/dept), task name, a description of what will done and the objective of the task. (identify the deliverable from this task)

**Subtask 1** – include the subtask name, a description of what will done and the 'results'.

**Subtask 2** – *include the subtask name, a description of what will done and the results'.* 

**Task 2** - include the task lead, task name, a description of what will done and identify the deliverable(s).

**Subtask 1** – include the subtask name, a description of what will done and the 'results'.

**Subtask 2** – include the subtask name, a description of what will done and the 'results'.

**Subtask 3** – include the subtask name, a description of what will done and the 'results'.

**Task 3** - include the task lead, task name, a description of what will done and identify the deliverable(s).

**Subtask 1** – include the subtask name, a description of what will done and the 'results'.

**Subtask 2** – include the subtask name, a description of what will done and the 'results'.

Phase II (state length as xx months)

Describe the Phase II work, key objectives and expected results.

**Task 4** – include the task lead, task name, a description of what will done and identify the deliverable(s).

**Subtask 1** – include the subtask name, a description of what will done and the 'results'.

**Subtask 2** – include the subtask name, a description of what will done and the 'results'.

**Task 5** - include the task lead, task name, a description of what will done and the objective of the task.

**Subtask 1** – include the subtask name, a description of what will done and the 'results'.

**Subtask 2** – include the subtask name, a description of what will done and the 'results'.

**Task 6** - include the task lead, task name, a description of what will done and the objective of the task.

**Subtask 1** – include the subtask name, a description of what will done and the 'results'.

**Subtask 2** – include the subtask name, a description of what will done and the 'results'.

#### 20. Responsibility Matrix

Provide a responsibility matrix to identify each organizations' responsibilities and matrices to <u>identify the responsibilities within each organization</u>. Include each team member's responsibility,

to include subcontractors supporting the OEM project team. The example below includes an illustration of typical departments involved in CNM efforts. Please update the table to include the specific departments/divisions anticipated to be included within the project team at your organization

Team Member #1 (OEM)								Team Member #2 (Sub to OEM)	
Task	Engineering Operations Facilities Production Control Planning Programs								
Program Management	A/R	I	I	I	I	I	R	I	
Phase I	А	R	R	I	I	I	R	I	
Task 1	А	R	R	I	I	С	R	I	
Subtask 1	А	R	R	I	I	I	R	I	
Subtask 2	А	R	R	I	I	I	R	I	
Task 2	А	R	R	С	С	С	R	I	
Subtask 1	А	R	R	I	I	I	R	I	
Subtask 2	А	R	R	I	I	I	R	I	
Task 3	А	С	с	С	С	С	R	I	
Subtask 1	А	R	R	С	С	I	R	I	
Subtask 2	А	R	R	I	I	I	R	I	
Phase II	А	С	С	I	I	I	R	I	
Task 4	А	С	С	С	С	С	R	I	
Subtask 1	А	R	R	I	I	R	R	I	
Subtask2	А	R	С	I	I	С	R	I	
Task 5	А	С	С	С	С	С	R	I	
Subtask 1	А	R	R	I	I	R	R	I	
Subtask2	А	R	с	I	I	С	R	I	
Task 6	A	R	R	I	I	I	R	I	
Subtask 1	A/R	С	С	I	I	I	R	I	
Subtask2	А	R	R	I	I	I	R	I	

A=Accountable R=Responsible C=Consulted I=Informed
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#### 21. Material/Equipment Summary

Identify the material, equipment, software, hardware required for this project.

Item	Purpose	Task/Subtask

### 22. Meetings/Travel

Include meetings and reviews to support the proposed project.

Purpose	Traveler (s)	Task	Departure City/State (airport)	Destination City/State

### 23. Implementation Plan:

Provide a well-defined plan that will support the transition of project results to the OEM facility and identify the resources required to achieve implementation (see table below). CNM will also incorporate the information provided into a standard Technology Transition Plan format, which will be submitted to ONR for approval. Technology Transition Plans for projects with durations longer than 12 months will be reviewed and updated as required to ensure consistency with project objectives and schedule. The key points to include in the Implementation Plan 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 (varies per project)	<b>Responsibility</b> (Name, Title, Role)	<b>Resource Commitment</b> (type, funding amount, funding source)
Equipment/Material		
Testing		

Requirement (varies per project)	<b>Responsibility</b> (Name, Title, Role)	<b>Resource Commitment</b> (type, funding amount, funding source)
Qualification / Certification		
Approvals (Mandatory)		

### 24. Risk Identification and Risk Management Plan

Managing risk is key to achieving successful project results. In order to minimize risk, the following critical activities/events have been identified for this ManTech project. Their severity, potential effect, and proactive mitigation measures should be summarized in the table below, to <u>include</u> <u>risks to full transition and implementation</u>. The example table below includes some common risk activities/events/elements but these are not all inclusive; each project will likely have unique risks particular to the project's execution. For purposes of development, assess each task for potential risks.

Activity/Event	Probability/Severity	Effect	Mitigation Strategy
Related projects/proposals not	Low/Low	Minimal; project not	None required
adequately funded		directly dependent on	
		results of other activities	
Unavailability of key project	Low/Moderate	Diminished project	Obtain management
personnel/resources		execution; negative effect	commitment of proposed
		on evaluation criteria	project personnel/resources
Technology components not	Moderate/Moderate	Diminished project	Leverage 3M test lab
properly		execution; negative effect	technicians and CNST "on-
understood/administered		on evaluation criteria	demand" resource network
Inadequate funding for	Low/Moderate	Technology	Identify external funding source
Government qualification testing		implementation delays	(e.g. Program Office, ONR);
			obtain commitment
Phase I go/no-go criteria not met	Low/High	Project termination	Solicit Navy Technical Code
			input during test procedure
			development

#### **Project Risk Assessment**

# 25. Benefits/Cost Savings/Cost Reductions:

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 platform manufacturer, 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 manufacturing economic impact of the technology and summarize cost savings/reductions/avoidance estimates on a per hull basis and as a 5-Year ROI value. 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. Include equations/calculations used to determine potential savings.

**26. Deliverables:** (these will be both program specific and project specific deliverables and will be placed in a chart, example provided)

The deliverables for this project will consist of the following items:

- a. Baseline Spend Plan. A month-by-month expenditure plan presented at the kickoff meeting and tracked throughout the project's period of performance. The Baseline Spend Plan will be reviewed at least quarterly with each Quarterly Review. Deviations greater than 20% from the spend plan could require a written recovery plan and/or updated Spend Plan. Significant deviations could require an 'Estimate to Complete' proposal with potential reductions in funding ceiling.
- b. Briefings, Presentations, and Meeting Documents. At a minimum, the project team will present an update to Navy ManTech Project Reviews semi-annually and at project end date (*template will be provided*). Each project team should expect to present the project at a relevant technology transfer forum (with CNM concurrence).
- c. Quarterly project status reports (t*emplate will be provided*). Include technical status of the project with highlights summarized in bullet format at the beginning of the report. Also include:
  - 1) Scheduled activities during the reporting period including milestones. This will include a 'percentage complete; for each applicable task/subtask.
  - 2) Past period performance and projected performance for the next reporting period. For each activity, include the following:
    - Budgeted amount of funding
    - Actual amount of funding expended
    - Remaining budget
  - 3) Narrative explanation of key cost or schedule variances, program impacts, and corrective action plan.
- d. Project reviews approximately 90 days after issuance of a task order (and approximately every three months thereafter). Informal team meetings may be held at the discretion of the CNM Project Manager. The OEM Project Manager shall issue minutes of the project reviews within two weeks of the project reviews, available to the project team, CNM and ONR Navy ManTech.
- e. Quad charts, project summaries, and periodic updates as requested
- f. Technology Transition Plan (and updates)
- g. OEM Implementation Plan (refer to Section 23)
- h. Final technical report describing the results of this effort including a summary of all work completed during the entire contract period (*template will be provided*). This format is acceptable for Phase I reports. Each deliverable report should meet the 'stand-alone' goal, where the contents are self-explanatory and provide the reader with sufficient detail to support the report's purpose.

i. Project specific deliverables (i.e., reports indicating the end of a critical phase or task, reports accompanying software releases or system upgrades—see example below), demo's, mock-ups, tooling, software, samples, and components purchased and/or fabricated under ManTech funding during the project, if applicable. This may also include process specifications, designs (both components and tooling), manufacturing cost data for tooling and component fabrication, and all test results. PowerPoint<sup>®</sup> slides are intended to supplement reports; slides <u>will not meet reporting requirements</u>.

	Deliverable	Description	Months After Award
1.	Kickoff	Review of the items addressed by the project team at	1
	Meeting/Report	the kickoff meeting as well as the action items given out	
		to each team member. Includes Baseline Spend Plan,	
2	Cianad	Sow review, Task order requirements, etc.	2
2.	Signed	Details technology transfer and implementation	3
	Technology	strategies, timeline, costs and contingencies.	
	Transition Plan		
3.	Quarterly Status	Quarterly Status Report will include accomplishments,	3
	Reports and	status & issues, actions, plans for next quarter and	
	Reviews	schedule & status.	
4.			
5.			
6.	Go/No-Go	Document input and results of Go/No-Go Milestone	8
	Milestone	Meeting and decision. This must include criteria for	
	Summary	transition and updated business case.	
7.	Phase I	Documentation of project steps, findings, prioritized	10
	Report/Review	recommendations with savings estimates in accordance with Phase 1 objectives.	
8.			
9.			
10.	Implementation	Plan that supports the transition of project results to the	16
	Plan	OEM facility and identify the resources required to	
		achieve implementation	
11.	Final	Documentation of all project steps, findings,	18
	Report/Review	recommendations and results in accordance with project	
		objectives. Include updated business case,	
		Implementation Plan status, etc.	

# 27. Schedule

*Provide a Project Schedule (e.g., Gantt chart) that shows anticipated project schedule for each listed phase, task and subtask.*