



**National Shipbuilding Research Program**

# Proposal Preparation Kit

Version: 5.3 dated May 27, 2011

(Replaces Version 5.2 dated May 25, 2011)

## National Shipbuilding Research Program Mission

Manage and focus national shipbuilding and ship repair research and development funding on technologies that will reduce the cost of ships to the U.S. Navy and other National Security customers by leveraging best commercial practices and improving the efficiency of the U.S. shipbuilding and ship repair industry. Provide a collaborative framework to improve ship-related technical and business processes.

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## 1 INTRODUCTION

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The Research Announcement (RA) is a recognized flexible mechanism for funding applied research and advanced technology development. The Proposal Preparation Kit (PPK) contains background material, guidance for the preparation of proposals for the Research Announcement, and other required forms and instructions. The PPK was prepared in an effort to provide industry, as well as educational and nonprofit organizations, with the important aspects of the RA process used by the NSRP Advanced Shipbuilding Enterprise (ASE) Program. This Proposal Preparation Kit replaces, in its entirety, the NSRP ASE Proposal Preparation Kit version 5.1 dated 7 January 2011.

### **National Shipbuilding Research Program Overview**

*NSRP ASE is structured as a collaboration of major U.S. shipyards focused on industry-wide implementation of solutions to common cost drivers. The program targets solutions to consensus priority issues that exhibit a compelling business case to improve the efficiency of the U.S. shipbuilding and ship repair industry. Solutions include both leverage of best commercial practices and creation of industry-specific initiatives. Aggressive technology transfer to, and buy-in by, multiple U.S. shipyards is strongly preferred for all funded efforts. The Executive Control Board (ECB), the governing body of the NSRP, includes representation from each member shipyard, with participation by the Navy, MARAD, and the Coast Guard. A high interest program to the Naval Sea Systems Command and shipbuilding industry leadership, NSRP ASE is an innovative approach in public/private cooperation to manage cost-shared R&D for technologies critical to Navy's ability to reduce ship costs. The Program's focus is on projects that address industry-wide needs versus shipyard-unique projects.*

## 2 GENERAL INSTRUCTIONS

**Note:** Always compare the Proposal Preparation Kit with the current Research Announcement instructions, as individual solicitations may be tailored for some projects and may differ somewhat from the instructions herein. Should that occur, the current Research Announcement instructions supersede the Proposal Preparation Kit.

A proposal submitted in response to a NSRP ASE Research Announcement solicitation posted on the [NSRP website](#) or [Federal Business Opportunities](#) is the primary vehicle available for receiving consideration for award. The proposal shall stand on its own merit.

The proposal should be prepared simply and economically, providing straightforward, concise delineation of capabilities necessary to perform the work being proposed. A full proposal shall consist of two separate volumes – technical and cost – as both are reviewed simultaneously.

**A comprehensive list of all the requirements contained in this document can be found in Appendix D. Offerors are strongly encouraged to use the checklist to ensure proposals are submitted in accordance with NSRP ASE requirements.**

Proposals containing data that is not to be disclosed to the public for any purpose or used by the NSRP ASE Program except for evaluation purposes shall include the following statement on their title pages:

*The proposal includes data that shall not be disclosed outside the Program Administrator (including the Technical Evaluation Review Panels, ECB, Major Initiative Teams, Program Technical Representatives, Blue Ribbon Panel, and any attendees at an ECB project selection/approval meeting) and the Government; it shall not be duplicated, used, or disclosed, in whole or in part, for any purpose other than to evaluate this proposal and negotiate any subsequent award. If, however, a contract is awarded to this offeror or quoter as a result of, or in connection with, the submission of these data, the Program Administrator and the Government shall have the right to duplicate, use, or disclose these data to the extent provided in the resulting contract. If selected for award, the technical proposal can be used by the Program Administrator staff, Major Initiative Team personnel, and Program Technical Representatives for purposes of project management and award negotiation. This restriction does not limit the Program Administrator and the Government's right to use the information contained in these data if they are obtained from another source without restriction. The data subject to this restriction are contained on sheets (insert page numbers or otherwise identify the sheets).*

Each restricted data sheet should be marked as follows:

*Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal or quotation.*

**The technical proposal shall be limited to:**

- 40 pages (fixed pitch font of 12 or fewer characters per inch or proportional font point size 10 or larger), single-spaced, single-sided, 21.6 x 27.9 cm (8.5 by 11 inches). Smaller type may be used in

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figures and tables, but must be clearly legible. Pages in excess of this limitation will not be considered.

- Margins on all sides (top, bottom, left, and right) should be at least 2.5 cm (1 inch).
- The page limitation **is exclusive of** the Cover Page, Table of Contents, List of Figures and Tables, Resumes, Statement of Work, and Letters of Commitment.

For further requirements on preparation of the technical proposal, see [Section 4](#).

**Cost proposals** have no page limitations; however, offerors are requested to keep cost proposals to **less than 45 pages** as a goal and to include page numbers. For further requirements on preparation of the cost proposal, see [Section 5](#).

**Proposers are strongly encouraged to build their proposal around the underlying business case that demonstrates value to the Navy and industry. To that end, past experience indicates that proposal preparation might best begin with thorough consideration of the business case logic. The use of pictures and graphics is strongly encouraged to succinctly represent project ideas, organization, etc.**

DO NOT SUBMIT ANY CLASSIFIED INFORMATION

A cover page is required on both the Technical Proposal (Volume 1) and the Cost Proposal (Volume 2), and must include the following information and statements:

**FIGURE 2-1 SAMPLE COVER PAGE**

**Name and address of offeror**  
**Title of proposal**  
**Abstract Number \_\_\_\_\_**  
**Volume 1 Technical Proposal**  
**(OR Volume 2 Cost Proposal)**  
**Team Members**

Identify proposal as either (1) Collaborative, or (2) Shipyard-Specific (limited to specific organizations/companies)

Statement that "This proposal is submitted pursuant to (cite the Research Announcement title, reference number, and date)".

Duration of effort

Names, telephone numbers, and E-mail addresses of the technical person and contractual person, along with an alternate for each, who may be contacted for evaluation or negotiation purposes.

Proposer certifies that, if selected for award, the proposer will abide by the terms and conditions of the NSRP ASE Technology Investment Agreement dated 25 May 2011 in its entirety.

Dates of submission and signature of official authorized to obligate the institution contractually.

**The proprietary data disclosure statement, when proprietary data is included**

Permission is granted to the NSRP ASE Program and the ECB of the NSRP to use a Technical Program Summary of this proposal in preparing future NSRP ASE Strategic Investment Plans and Research Announcements.

## 3 ABSTRACTS

### 3.1 Abstract Instructions

Abstracts are mandatory and are intended to provide intermediate feedback as to whether the proposer is on track in gathering and articulating some of the key information required for a successful project and whether that project would be appropriate for shared funding from NSRP.

The abstract will be shared with Naval Sea Systems Command, its affiliated Program Executive Officers and their staffs, and U.S. Coast Guard engineering and acquisition representatives for their comments and input as to the potential value of the proposed projects.

While abstracts are typically requested at the time a Research Announcement is released, in some cycles they may be requested prior to release of a Research Announcement.

Each abstract should conform to the Executive Summary format provided for a full proposal, but stated more briefly and without the tables or cost information. Include the following items:

- **PROBLEM TO BE ADDRESSED/GENERAL OBJECTIVES (WHAT)**
- **BUSINESS CASE SYNOPSIS (WHY)**
- **OUTLINE OF TECHNICAL STRATEGY AND KEY INNOVATIONS (HOW)**
- **IMPLEMENTATION AND TECHNOLOGY TRANSFER PLANS (COMMITMENT TO IMPLEMENT AND WILLINGNESS TO SHARE)**
- **PARTICIPANTS (CONFIRMED OR ANTICIPATED) (WHO)**

**Each abstract is to include a cover sheet that includes the project title and point of contact, and up to three additional pages.**

The required contents of an abstract are intended to help prospective applicants evaluate matters in the context of key goals and criteria of the NSRP ASE program, overall, and this focused solicitation in particular. The abstract should constitute a fact sheet for the proposed project. Background information, rationale, detailed elaboration, and other information not specifically requested in the abstract should be held for incorporation into a full proposal.

***The page limit is intended to focus the responses on a few essential and important details of a proposal.***

### 3.2 Abstract Feedback

Each abstract will receive feedback from the NSRP Executive Director staff on a scale of A through D, as explained below. No other rating or recommendation will be provided, but there may be notes elaborating on the assigned grade. Any Navy feedback will also be provided to the abstract submitter. Feedback will not be shared with evaluators of full proposals.

Compliant proposals must provide evidence of both technical and business merit in accordance with the NSRP project selection criteria as specified in the current Research Announcement. Full proposals must stand on their own; their evaluation is not affected by the information provided in the abstract or the Executive Director staff's or Navy response.

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Grading Definitions:

- A: With appropriate elaboration in response to the published NSRP ASE project selection criteria, a full proposal reflecting your abstract is likely to be competitive.
- B: Appropriate elaboration might lead to a competitive full proposal; however, certain key elements of the NSRP ASE project selection criteria have not been adequately addressed in your abstract.
- C: Although you provide no specific evidence in conflict with the NSRP ASE project selection criteria, information in your abstract does not support a favorable response. Significant elaboration would be required to support a competitive proposal.
- D: Your abstract suggests that you do not fully understand and/or are in conflict with the NSRP ASE project selection criteria; a full proposal is not likely to be funded.

Specifically: \_\_\_\_\_ *(elaborating comments, as applicable)*

## 4 TECHNICAL PROPOSAL

To ensure proper consideration, **the technical proposal format shown below is mandatory**. If there are any items which are not applicable to a specific proposal, include the section topic in the proposal and annotate the section as not applicable with a short explanation as to why it is not applicable.

### 4.1 Cover Page

The cover page must follow the format and content guidelines described in [Section 2](#), General Instructions.

### 4.2 Table of Contents

- COVER PAGE
- TABLE OF CONTENTS
- LIST OF FIGURES AND TABLES
- EXECUTIVE SUMMARY
- TECHNICAL APPROACH
  - BACKGROUND/SCOPE/PROJECT OBJECTIVES
  - TECHNICAL DISCUSSION
  - STATE-OF-THE-PRACTICE
  - PEOPLE AND ORGANIZATIONAL IMPACTS
- BUSINESS CASE
  - PROJECT METRICS
- IMPLEMENTATION AND TECHNOLOGY TRANSFER
- PROJECT MANAGEMENT
  - MANAGEMENT AND TECHNICAL TEAM
  - PROJECT ORGANIZATION
  - PROJECT SCHEDULE
  - PROPOSER'S INTEREST
- RELATED PROPOSALS
- APPENDICES
  - A. RESUMES OF KEY PERSONNEL
  - B. STATEMENT OF WORK (SOW)
    - SCOPE
    - DETAILED DESCRIPTION OF TASK(S)
    - TECHNICAL/DESIGN REVIEWS
    - DELIVERABLES
    - METRICS/BENEFIT REALIZATION
  - C. LETTERS OF COMMITMENT
  - D. (OPTIONAL) VIDEO SUMMARY

### 4.3 List of Figures / List of Tables

The List of Figures is a quick reference of charts, graphs, and other important non-text information. A separate List of Tables is recommended.

### 4.4 Executive Summary

The Executive Summary is limited to **no more than five pages**.

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

#### 4.4.1 Synopsis

This section provides, in a very brief fashion (no more than 2-3 sentences), a description of what the project team proposes to do, and what the effort will produce. (This has been added to the proposal requirements in response to evaluators' desire to be able to see "the bottom line up front.")

#### 4.4.2 Problem to be addressed/General Objectives (What)

This section provides a summary of what problem the proposed technology addresses. The following questions should be answered:

- What problem is being addressed that is within the scope of this competition?
- What goals of this program does your project address?
- What fundamental difference in the U.S. shipbuilding and repair industry will be enabled by the successful completion of the proposed project?

#### 4.4.3 Business Case Synopsis (Why)

This section describes the business opportunity that your project will address. Include likely products, target market, potential customers (e.g., specific Navy platforms), size of market opportunity, avenues for broad diffusion of benefits, and rationale for your choices.

***Proposers are strongly encouraged to build their proposal around the underlying business case.***

Examples of items include:

- **Indications of Navy and Industry Demand**
- **Expected Benefits:** A sentence or two describing the pathway to economic benefit for the proposer, the Navy and broader industry.
- **Project Metrics:** Indicate the performance improvement metrics that will be developed for the project, using the format in the **mandatory** table below. Except where clearly not practicable, performance improvement metrics shall be developed and tracked for all projects, to compare the "as-is" practice to that which is anticipated as project results are implemented. Actual benefits realized for the indicated metrics will be included in project reports. The metrics included must clearly support the business case cited.

**TABLE 1 METRICS/BENEFIT REALIZATION**

Metric	“As-Is” Baseline	Project Goal	Tracking & Reporting Plan
<i>(sample metrics &amp; data)</i>			
Ship repair cycle time	120 days	85 days	Select a similar ship availability as baseline; document cycle time at the end of the job
Transaction cost for _____	\$700	\$125	Report quarterly as process improvements are implemented
Parts in inventory	20,000	12,000	Set a monthly part reduction goal & assess each month; report quarterly the reduction and any changes to the plan to reach project goal
Technology Readiness Level	4 – Component validation in laboratory environment	5–Component validation in relevant environment	Demonstrate viability of lab-tested technology in shipyard production environment

**4.4.4 Implementation and Technology Transfer (Commitment to Implement and Willingness to Share)**

Provide the following information in this section:

1. Your commitment to implementing any technology that is successfully developed.
2. Your plans for transferring technology to the rest of the U.S. shipbuilding industry.
3. How would success in your technical effort lead to broad-based economic benefits to the U.S. shipbuilding & repair industry? How will you leverage the benefits from your project into a sustainable competitive advantage?
4. How you plan to fund the follow-through commercialization/implementation efforts, which are outside the scope of this project.
5. The impact any proprietary material will have on the ability to conduct effective technology transfer.

**4.4.5 Outline of Technical Strategy and Key Innovations (How)**

This section provides a summary of how the project will approach the problem, and the key innovations expected from the project. Include identification and a brief description of major tasks, by task number, to permit correlation with the Man-hours and Material Cost Summary table appearing later in the Executive Summary.

**If the proposed effort is follow-on work to a previously funded effort, include a brief synopsis of what was accomplished, the previous project’s results, and how the proposed effort builds upon previous work.**

**4.4.6 Participants (Who)**

Provide the following **mandatory** summary table that identifies each project participant, their role and key contributions to the project, for the proposed effort.

**TABLE 2 PARTICIPANTS**

Project Participant	Role and Key Contribution
Shipyard AAA	
Company BBB	
Organization CCC	
.....	

**4.4.7 Summary Work Statement and Funding Plan (*When and How Much*)**

This section is a concise summary of the project schedule (by phase), phase go/no-go criteria, costs, and key deliverables. Provide the following **mandatory** table as a summary of the costs and schedule of the phases:

**TABLE 3 SUMMARY WORK STATEMENT AND FUNDING PLAN**

Phase Number	1	2	3	TOTAL
Phase start date				
Phase completion date				
Duration (months)				
NSRP Program funding				
Cost share				
Public-sector participant provided funds				

*[Note: Phases must be sequential, non-overlapping, and no longer than 12 months each.]*

**4.4.8 Cost Share Summary**

Provide the following **mandatory** table as a summary of cost share categories, sources, amounts, along with the sources and amounts of any public-sector participant provided funding

**TABLE 4 COST SHARE SUMMARY**

Cost Share Summary		
Cost Share		
Category	Contributing Organization	Proposed Value

# National Shipbuilding Research Program

Proposal Preparation Kit

	TOTAL COST SHARE	
<b>Public-Sector Participant Provided Funding</b>		
Category	Contributing Organization	Proposed Value
	Total Public-Sector Participant Provided Funding	

### Cost Share Categories

1. Cash (including donations from state or local governments)
2. Labor costs (including labor-related fringe benefits)
3. Expenses associated with allowable labor cost categories that are not billed directly to program funds
4. Independent research and development (IR&D)
5. Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) in accordance with Government guidelines  
(NOTE: Federally-funded Phase III SBIR/STTR projects cannot be used as cost share)
6. Overhead (excluding labor-related fringe benefits)
7. General & administrative (G&A) services
8. Manufacturing and production engineering (M&PE)
9. Implementation costs within the period of the project
10. Use of equipment (including software)
11. Intellectual property (market value)
12. Space (land or buildings)

### 4.4.9 Key Deliverables / Go-No Go

Provide the following **mandatory** summary table (simplified example below) that indicates the key deliverables and the criteria which will be used to make a determination to continue from one phase to another, or stop the project. Phases should be defined by logical break points in the project work to decide if the previous efforts provide sufficient positive results to support continued investment. Phase breaks should not be just arbitrary dates in the project.

**TABLE 5 KEY DELIVERABLES /GO-NO GO**

	Phase 1	Phase 2
<b>Key Deliverables (Major Payable Milestones)</b>	<ul style="list-style-type: none"> <li>• Nationwide survey and analysis of shipyard injury and illness trends</li> <li>• An analysis of risk factors that contribute to leading causes of shipyard accidents, injuries and illness</li> </ul>	<ul style="list-style-type: none"> <li>• Intervention Effectiveness Assessment and Risk Factor Analysis</li> <li>• Consensus Ergonomic Guidelines to OSHA</li> <li>• Industry-wide reports</li> <li>• Workshop on results</li> </ul>
<b>Criteria for “Go” Decision on Subsequent Phase</b>	<ul style="list-style-type: none"> <li>• Survey successfully completed</li> <li>• Analysis documented and submitted</li> <li>• Review of analysis indicates high quality</li> </ul>	N/A

**4.4.10 Total Man-hour Summary:**

Provide the following **mandatory** summary table of the **total** estimated man-hours (**NSRP-funded and cost-shared, combined**), broken down by project participant and major task. **This information must be consistent with information on man-hours in the cost proposal.**

**TABLE 6 TOTAL MAN-HOUR SUMMARY (NSRP-FUNDED AND COST-SHARED)**

Major Task #	Task Title	Participant 1 Man-hours	Participant 2 Man-hours	Participant 3 Man-hours	Total Man-hours
1					
2					
3					
...					
Total					

**4.4.11 Total Material/Equipment Summary**

Provide the following **mandatory** summary table of the **total (NSRP-funded and cost-shared, combined)** significant material and equipment to be purchased in support of the project. Include the type of material or equipment, the approximate quantity, and how it will be used to support the project. **This information must be consistent with information on material and equipment in the cost proposal.**

**TABLE 7 TOTAL MATERIAL/EQUIPMENT SUMMARY (NSRP-FUNDED AND COST-SHARED)**

Type of Material / Equipment	Quantity (approximate)	How Used to Support Project

***End of Executive Summary***

## 4.5 Technical Approach

Provide sufficient technical detail and analysis to support the technical approach being proposed. Clearly identify the core of the intended approach. It is not effective to simply address a variety of possible solutions to the technology problems.

### 4.5.1 Background/Scope/Project Objectives

Provide the following information:

- Background and Proposer’s understanding of the problem and/or technology/process deficiency
- Scope, including summary of technical/process issues being addressed
- Project Objectives that include:
  - Vision of what will be achieved
  - Solutions the effort will produce
  - Benefit metrics

### 4.5.2 Technical Discussion

Provide the following information:

1. Essence of intended approach
2. Technical detail and analysis to support approach being proposed.
3. If proposing “new and creative” solution, develop and analyze in this section.
4. Key technical, schedule, and cost risks, their potential impact and mitigation.
5. If proposal requires sustainment funding after the project is completed, include plans/structure for obtaining that funding.
6. If proposal is for follow-on work on a topic that has been repeatedly funded in the past or if the proposed effort will not fully resolve the stated problem, outline an exit strategy for this long-term investment, including what other actions are needed, how long it will take, how much more funding will be required, etc.

### 4.5.3 State-of-the-Practice

**Each proposal must include a discussion of what technology is currently available in the proposed area.**

Discussions should include:

- Results of/evidence of the current state of the art/literature searches and how your approach compares to other possible approaches.
- Current limitations of the general technology area / process being addressed
- Connections to ongoing or past projects in the general technology area / process being addressed
- From what technical baseline will your project begin (including work you have already done)? Given that baseline, what additional technical challenges need to be addressed to achieve your technical objectives?

- What organizations or individuals (other than yourselves) are doing the most advanced work in your proposed area of research? By comparison, why are you likely to succeed?
- Identification of government funding (to include but not be limited to SBIR and ManTech) for a current effort(s) or one being proposed within the next 12 months that is similar to the work being proposed

Proposers are encouraged to review the [NSRP Project Book](#) to review project results.

### 4.5.4 People and Organizational Impacts

**Describe the project's approach to addressing people and organizational impacts, including how, in the context of performing this project:**

- organizational change/cultural change will be accommodated
- current human resource functions will be impacted
- education/training will be addressed

### 4.6 Business Case

Any business case requires adequate justification. A minimum of one (1) page of justification is **mandatory**. The proposal must 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 shipbuilding industry, the level and nature of benefit to the Navy and industry, the potential for lead-time and cycle-time reduction, the life of the product/technology in the marketplace (years), and any synergy with other operations, businesses, research, and programs. The proposal should identify why NSRP ASE support is needed and what difference NSRP ASE funding is expected to make in terms of what will be accomplished.

A requirement for this solicitation is to identify project metrics, including a plan to realize the benefits of achieving project goals. Describe metrics applicable to the project that will measure the benefit of the proposed condition compared to the as-is condition, and the means by which the project team will collect those metrics during the term of the agreement. Project metrics should logically follow from, and act to validate the underlying business case.

Include a narrative discussion of benefits in the following areas (as applicable) and where able, include estimates of the cost savings or other applicable measures of benefit. Explain how the benefits described in your proposal apply relatively to the following areas. For example, "Roughly 80% of the benefits for this effort come from labor and material savings, 15% cost avoidance and 5% from minimizing rework." Provide the underlying logic stream used to determine benefit/savings in the areas where significant improvement is predicted.

- |                             |  |
|-----------------------------|--|
| • Labor (Direct & Indirect) | • Material & Supplies                        |
| • Maintenance               | • Schedule                                   |
| • Rework                    | • Cost Avoidance                             |
| • Scrap                     | • Time Value of Money                        |
| • Services                  | • Additional Income                          |
| • Equipment                 | • Increased Technology Readiness Level (TRL) |
| • Inventory                 | • Other                                      |
| • Work In Progress (WIP)    |  |

### 4.7 Risk Management

The offeror must identify and discuss the risks to the successful completion of the proposed project. Risk factors may be those inherent in the work or unique to the offeror's chosen approach. While not a complete list, general areas of possible risk that are of concern are technical, schedule, cost, safety, security (including personnel, information technology), implementation and environmental risks. The offeror's discussion of a risk factor should provide the offeror's approach to managing the risk--the probability of the risk, impact and severity, time frame and risk acceptance or mitigation.

### 4.8 Implementation & Technology Transfer

Specific plans for implementation within the proposing shipyards, including concrete evidence of senior management support. An explanation of how the project's approach to addressing people and organizational impacts will be incorporated within the planned implementation.

Offerors must also provide an approach for technology transfer beyond the project team. This approach should include:

- **Technology Transfer Outline:** Outline of the plan for industry dissemination of project developments both during project execution and following implementation. This might include report structure, workshops, interactive training activities, Panel activities, etc. It might also include on-site training of staff from other shipyards and industry participants, as well as plans for the maintenance of programs, processes, or services after initial implementation.
- **Deliverable Distribution:** Indicate to what extent deliverables identified in the Statement of Work will be made available to industry, as this will be taken into consideration during the evaluation process.
- **Technology Transfer Activities:** Proposed demonstrations, pilots, project documentation, training, and prototypes as well as any other technology transfer activities.
- **Training Materials:** Discussion regarding the potential use of training material. This element is needed within the participating shipyards, industry at large, and educational institutions. Any plan to involve educators in the preparation of workshops, training materials, etc. should be discussed.
- **Proprietary Material:** The impact any proprietary material will have on the ability to conduct effective technology transfer.

NOTE: A more detailed technology transfer plan is required as a project deliverable within 75 days of selection and will be addressed in the letter contract. The [Technology Transfer & Implementation Facilitation Guide](#) is available on the NSRP website to aid in preparing this portion of the proposal, as well as developing the Technology Transfer Plan.

The rigor and complexity of the implementation approach and technology transfer approach should be commensurate with the nature and scope of the project.

***Proposers are cautioned, however, that failure to include discussions of both the implementation approach and the technology transfer approach may cause the proposal to be rejected upon initial screening.***

## 4.9 Project Management

This section should describe how the project will be organized and managed.

**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 (most recent 5 years) 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 IR&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. It should identify all key personnel. Provide resumes (no longer than 2 pages each) of key personnel in Appendix A (resumes do not count in page count limit). 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 and will not count in page count limit) and **must be signed by an individual who has company signature authority to commit company resources.** Describe any capabilities the team has that are uniquely supportive of the technology to be pursued. Also, identify any key facilities and resources proposed for the effort.

**Project Organization:** Describe the solidarity of the companies/team members and their ability to conduct difficult technical programs. Include Organization Chart(s) with Key Personnel (from prime contractors, subcontractors and university personnel). Discuss the extent to which the proposer assigns top people to the project and the priority given to this work in relation to other company activities.

**Project Schedule:** The schedule represents the offeror's plan to perform the program tasks in an orderly, timely manner. Provide each major task identified in the Statement of Work as a separate line on the program schedule chart. Address overall project duration, including proposed phases with **associated criteria for making a determination to proceed from one phase to another** based on results. The performance-based criteria must be in sufficient detail to permit a Go/No-Go phase transition decision recommendation to the ECB. Each of the phases should include milestones that relate to specific deliverables during the phase. Proposed phases must be no longer than one year, must not overlap and phases outlined in the technical proposal should match those in the cost proposal.

**Proposer's Interest:** Discuss why this project is strategically important to your organization. Provide evidence of your organization's commitment (company champion, etc.). Additionally, address how the success or failure of this project will impact your organization. Answer the question "Would the work proposed in your project be pursued, by yourself or others, in the absence of an NSRP ASE award?" In that circumstance, identify how the scope and objectives would differ.

**Related Proposals:** Discuss any other proposals submitted for this cycle that this proposal is dependent upon and the specifics of any co-dependency. Also, identify any **cost share** included in this proposal that is also proposed in any other submission to the NSRP ASE Program.

Please refer to the [Project Management Plan](#) template for further assistance in preparing the Project Management Plan

## 4.10 Appendices

### 4.10.1 Appendix A – Resumes of Key Personnel

Include the resumes of key prime contractor, subcontractor and university personnel who will be assigned to work on this project if selected. Indicate what percentage of their total available work time each will devote to this project. Each resume must be no more than two (2) pages in length.

### 4.10.2 Appendix B – Statement of Work (SOW)

The SOW developed by the contractor and included in the proposal is intended to be incorporated into a binding agreement if the proposal is selected for award. If no SOW is submitted with the proposal there may be no award. The proposed SOW shall contain a summary description of the technical methodology as well as the task description, but not in so much detail as to make the contract inflexible. DO NOT INCLUDE ANY PROPRIETARY INFORMATION OR COMPANY-SENSITIVE INFORMATION IN THE SOW TEXT. The following is the required format for the SOW.

- 1.0 Scope:** This section includes a statement of what the program covers. This should include the technology area to be investigated, the objectives/goals, and major milestones for the effort.
- 2.0 Detailed Description of Tasks:** The tasks, which represent the work to be performed under the contract, will be considered binding upon contract award. Thus, they should be developed in an orderly progression and in enough detail to establish the feasibility of accomplishing the overall program goals. The work effort should be segregated into major tasks and identified in separately numbered paragraphs, as in the example below. Any cost-shared work is to be included in the Description of Tasks.

#### 2.0 Detailed Description of Tasks

##### 2.1 Task 1 –

2.1.1 -- Subtask

Deliverable:

2.1.2 -- Subtask

Deliverable:

##### 2.2 Task 2 –

2.2.1 – Subtask

Deliverable:

2.2.2 – Subtask

Deliverable:

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Each major task included in the SOW should be separately priced in the cost proposal. Subtasks need not be separately priced in the cost proposal. An option may be included in the SOW for additional activities after project completion to support the transfer of technology developed to industry. This option may be exercised during the contract period depending on funding availability and the merits of the project results

- 3.0 Technical/Design Reviews:** The contractor shall identify intended quarterly reviews and when and where they will be conducted.
- 4.0 Deliverables:** Results of the technical effort are contractually binding and shall be identified herein. Proposers are advised to read the [Technology Investment Agreement](#) carefully. Any and all hardware/software to be provided to the NSRP as a result of this program shall be identified. A Technology Transfer Plan and a Project Management Plan shall be included as deliverables. If appropriate, a Software Development Plan shall also be included as a deliverable. Deliverables should be submitted in PDF or MS Office (98 or later) format.
- 5.0 Metrics/Benefit Realization:** Indicate the performance improvement metrics that will be developed for the project, using the format in the table below. This presentation should correspond to the Metrics information in the Executive Summary. Except where clearly not practicable, performance improvement metrics shall be developed and tracked for all projects, to compare the “as-is” practice to that which is anticipated as project results are implemented. Actual benefits realized for the indicated metrics will be included in project reports. Include this sentence before the table: “Metrics will be reported in accordance with the intervals specified in the metrics table and procedures to be established by the Program Administrator.”

**TABLE 8 METRICS/BENEFIT REALIZATION**

Metric	“As-Is” Baseline	Project Goal	Tracking & Reporting Plan
<i>(sample metrics &amp; data)</i>			
Ship repair cycle time	120 days	85 days	Select a similar ship availability as baseline; document cycle time at the end of the job
Transaction cost for _____	\$700	\$125	Report quarterly as process improvements are implemented
Parts in inventory	20,000	12,000	Set a monthly part reduction goal & assess each month; report quarterly the reduction and any changes to the plan to reach project goal

# National Shipbuilding Research Program

## Proposal Preparation Kit

Technology Readiness Level	4 – Component validation in laboratory environment	5– Component validation in relevant environment	Demonstrate viability of lab-tested technology in shipyard production environment
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### 4.10.3 Appendix C – Letters of Commitment

Include Letters of Commitment from key member companies/organizations. These letters shall not exceed one page in length and must reflect commitment (e.g., *cost share*, other public-sector participant provided funding, etc.) to the project and not discuss technical information. If the letters of commitment are not included in the proposal, it may result in a lower evaluation of the technical proposal in the Team Strength and Management Plan technical evaluation criteria. Letters of commitment **must be signed by an individual who has signature authority to commit company resources.**

### 4.10.4 Appendix D – (OPTIONAL) Video Summary

Proposers may also optionally include a short (no more than 15 minutes) video presentation that provides a high level summary of the project Technical Proposal. The video presentation is envisioned to be much like the oral presentation that would be given to the Blue Ribbon Panel later in the solicitation cycle. The advantage in providing the video is that the summary information, in the proposer’s own spoken words, would be available to Technical Evaluation Review Panel members and Navy sponsor staffs. In-person oral presentations before the Blue Ribbon Panel for competitive range proposals will remain a part of the NSRP process.

The video presentation should be targeted to an executive-level audience, and should answer the basic question, “Exactly what are you proposing to do, why are you doing it, and how will it be done?” Video content can include one or more individuals on- or off-camera, plus charts, pictures or other visual aids—or some combination thereof.

The video file, if provided, must be included on the CD (or other equivalent digital media) containing the offeror’s Technical Proposal.

## 5 COST PROPOSAL

The objective of the Cost Proposal is to provide sufficient cost information to substantiate that the proposed cost is realistic, reasonable and complete for the proposed work. The cost proposal should provide enough information to ensure that a complete and fair evaluation of the reasonableness and realism of cost or price can be conducted and reflect the best estimate of the costs for the program. The cost proposal must be consistent with information provided in the technical proposal (i.e., costs, cost share, dates and length of phases, etc.).

*NOTE: Proposals that deviate substantially from these guidelines or that omit substantial parts or sections may be found unresponsive and may be eliminated from further review and funding consideration. Spreadsheet programs other than the Excel file provided may be used, but the same information MUST be submitted in accordance with the cost proposal requirements.*

### 5.1 Cover Page

The cover page must follow the format and content guidelines described in Section 2, General Instructions.

### 5.2 Table of Contents

To ensure cost proposals receive proper consideration, **the cost proposal format shown below is mandatory.**

**COVER PAGE**  
**TABLE OF CONTENTS**  
**LIST OF FIGURES AND TABLES**  
**SECTION I: COST PROPOSAL SUMMARY SHEET**  
**SECTION II: NSRP ASE FUNDED COSTS BY MAJOR TASKS**  
**SECTION III: BUDGET NARRATIVE**  
**SECTION IV: PREFERRED PAYMENT METHOD**  
**SECTION V: FINANCIAL VIABILITY**  
**SECTION VI: COST SHARE**

### 5.3 List of Figures / List of Tables

The List of Figures is a quick reference of charts, graphs, and other important non-text information. A separate List of Tables is recommended.

### 5.4 SECTION I: Cost Proposal Summary Sheet

Using the form in Attachment 1 to this document, this section should include a summary of all of the proposed costs for the project by cost element (direct labor, travel, team members, subcontractors, material/equipment, other direct costs, indirect costs), and the total of these costs to the NSRP ASE Program and the total cost share that will be submitted by the offeror. The total on the Cost Proposal Summary Sheet should equal the total shown on the Costs by Major Task Sheet(s). All proposers should assume a 1 April 2011 start date for Phase 1 for cost estimating purposes (i.e., Phase 1, Quarter 1 will be 1 April 2011 to 30 June 2011, with 3-month quarters thereafter).

The labor hours requested for the Cost Proposal Summary Sheet(s) are for NSRP ASE funded labor only (do not include cost shared labor hours). The labor hours and dollars included in the Cost Proposal Summary Sheet should be for the offeror only. The authorized company representative who signs the form must have delegated fiduciary authority. By signing this form, the company representative verifies the accuracy of the proposal. The signature also signifies the company representative has coordinated with top management within his/her own company with respect to their commitment to the proposed project.

### **5.5 SECTION II: NSRP ASE Funded Costs by Major Tasks**

The NSRP ASE Total Program-Funded Costs by Task Sheet (see form in Attachment 1) must be submitted for each Major Task that is stated in the Statement of Work. This task sheet is for total NSRP ASE-funded costs -- do not include cost share on this form. The sheet(s) should be complete and reflect estimated costs for each task by quarter, as well as totals for the entire project. The sum of the major tasks must equal the total of the NSRP ASE-funded costs, including any program funds required for Government participants, on the Cost Proposal Summary Sheet. It is recommended that the number of major tasks be kept to the minimum number required to effectively manage the project.

### **5.6 SECTION III: Budget Narrative**

The budget narrative is excluded from the page limitation and is used to assess various criteria. The contracts official will use this section to determine reasonableness, allowability, and allocability of costs. The budget narrative section should provide a more detailed breakdown of the figures that have been reported on the Summary Sheet and Task Sheets. This section should also give substantiation and written explanation of proposed costs if necessary. Breakdowns should be as accurate and specific as possible. Ensure that any figures presented in this part are consistent with the figures on the Summary Sheet and Task Sheets.

The budget narrative must include, at a minimum, details on the following cost categories for the NSRP ASE funded cost:

#### **5.6.1 Labor Rates**

Identify the position title of all personnel and hourly rate, including fringe benefits. Show estimated hours for each employee, applicable to the proposed project. If your approved company estimating procedures use average labor rates for specific labor categories, this would be acceptable. Consultants should NOT be included in this category; they should be listed under the "subcontracts" category. It is recognized that an organization may not be able to identify all of the personnel to be assigned to the project several years down the road. Where this cannot be done, use generic position titles such as "senior chemical engineer." If direct labor costs include allocated direct costs or other direct costs in accordance with the proposer's established accounting and estimating practices and systems, identify these costs separately and provide an explanation and basis for proposed costs. Please note that rate and pricing information is required to properly perform the cost analysis of a proposal. Proposals without this information cannot be properly evaluated and may be eliminated from selection for award.

### **5.6.2 Fringe Benefits**

Identify percentage rate and, if greater than 40 percent and the organization does not have Government certified rates, proposers may be asked to provide substantiation. If fringe benefits are normally included in your organization's indirect cost rate, they should be budgeted as such. A statement to that effect should be provided.

### **5.6.3 Travel**

Provide an estimate of the travel required for the project broken out by project participant. Estimate the number of trips; cost per trip; number of days; number of persons; destination; approximate travel time frames; and most importantly the purpose of the travel. An example format is provided in Attachment 1. Travel may be estimated based on your company approved methodology. The key is to apply best estimating techniques that are auditable. Please include a brief explanation of the methodology used to estimate travel costs. Note that NSRP ASE Program award recipients are expected to be cost-conscious regarding travel, for example, using coach rather than first class accommodations and, whenever possible, using Government per diem, or similar regulations, as a guideline for lodging and subsistence costs.

### **5.6.4 Material/Equipment**

No significant items of property are expected to be acquired using NSRP ASE Program funding. However, if you choose to budget for this, identify each item of new material/equipment, the cost, and the basis for determining cost (e.g., vendor quotes, catalog pricing data). Budget estimates for equipment items exceeding \$50,000 each must be described and justified separately. The value of equipment should be prorated according to the share of total use dedicated to carrying out the proposed work. Include a brief explanation of the prorating methodology used.

### **5.6.5 Team Members**

Provide a list of all team members and a total cost for each team member. A team member is any organization that potentially benefits from the proposed R&D and contributes cost share; team members cannot receive fee. For team members whose program funds exceed \$100K, provide a cost breakdown (e.g., labor, travel, material, subcontractors, indirects) by phase for each team member. Proposer must also state that a cost and price analysis has been performed on all team members and their proposed costs found to be fair and reasonable. In the interest of equity among all proposers and to ascertain accurate costs for each proposed effort, a firm cost proposal for each team member must be obtained, as it will be used as the basis of award.

### **5.6.6 Subcontractors/Consultants**

Provide a list of all subcontractors or consultants and a total cost for each subcontractor and/or consultant. A subcontractor is an organization that provides a contracted service and does not contribute cost share. For subcontractors/consultants over \$100K, provide a cost breakdown (e.g., labor, travel, material, subcontractors, indirects). Proposer must also state that a cost and price analysis has been performed on all subcontractors/consultants and their proposed costs found to be fair and reasonable. For consultants without Government-approved rates, proposer must be able to justify that the rate proposed represents the consultant's most favored customer rate. In lieu of a cost and price analysis for fixed-price

subcontracts, proposers may provide evidence of competition solicited. In the interest of equity among all proposers and to ascertain accurate costs for each proposed effort, a firm cost proposal for each subcontractor/consultant must be obtained, as it will be used as the basis of award.

**Government Participants.** Government participants are federally-funded entities, such as Naval shipyards and Federal labs, participating in the proposed effort. NSRP ASE Program funds to be provided to Government participants are segregated in the Cost Proposal Summary Sheet. Nevertheless, if any Government participants will be receiving over \$100K in NSRP ASE Program funds, provide a cost breakdown (e.g., labor, travel, material, subcontractors, indirects). Proposer must also state that a cost and price analysis has been performed on all government participants and their proposed costs found to be fair and reasonable.

### 5.6.7 Other Direct Costs

Identify and provide a detailed description of any other direct costs that do not fit into the cost categories above, including the basis for determining those costs (e.g., vendor quotes, catalog pricing data, company estimating procedures, etc.).

### 5.6.8 Indirect Costs

Provide an estimate of the total indirect costs and provide data to support your indirect cost rates by one of the following methods:

- 1) Specify your current indirect rates and:
  - a. Provide a copy of certification from a Federal agency indicating these indirect rates are approved by the Federal agency; or
  - b. Provide a letter from your Administrative Contracting Officer, in lieu of a rate certificate, stating these indirect rates are approved by a Federal agency; or
  - c. If you do not have approved rates, provide detailed supporting data to include (1) indirect rates and all pricing factors that were used; (2) methodology used for determining the rates (e.g., current experience in your organization or the history base used); and, (3) all escalation, by year, applied to derive the proposed rates. If computer usage is determined by a rate, identify the basis and rationale used to derive the rate.

Alternatively, in lieu of providing your indirect rates, if you can obtain appropriate government assistance, you may provide a letter from the cognizant Federal audit agency stating that, based upon their review of your proposal, the indirect rates used in your proposal are approved by a Federal agency and were applied correctly in this specific proposal.

Supporting data in one of the above formats must be provided with your proposal. If you elect to rely on government inputs as discussed above, you are responsible for ensuring any government agency cooperation is obtained so that your proposal is complete when submitted. Costs that are directly identifiable to other programs will not be paid by the NSRP program.

**5.6.9 Fee/Profit**

Fee or profit is unallowable for the Prime contractor and team members (as defined above). This commitment of the Prime contractor and team members demonstrates willingness to share the cost.

**5.7 SECTION IV: Preferred Payment Method**

In this section, identify which of the two payment methods is preferred. The two methods are (1) Cost Reimbursable Milestones (with ceiling), and (2) Adjustable Fixed Price Milestones. If both methods are acceptable, please indicate in this section. A discussion of these methods may be found in Article V of the Technology Investment Agreement.

**5.8 SECTION V: Financial Viability**

This section may provide the offeror’s current Dun and Bradstreet financial report (in accordance with all applicable copyright requirements), or if you prefer the following financial and employment information from the most recent preceding three years (or for the number of years the organization has existed, if less than three years):

**TABLE 9 FINANCIAL VIABILITY**

	<b>Year T-3</b>	<b>Year T-2</b>	<b>Year T-1</b>
<b><i>Income Statement</i></b>			
Revenue			
Annual Sales			
Cost of Sales (Cost of Goods Sold)			
R&D Expenditures			
Net Income Before Taxes			
Net Income			
<b><i>Balance Sheet</i></b>			
Total Assets			
Cash and Cash Equivalents			
Accounts Receivable			
Total Liabilities			
Accounts Payable			
Loans and Leases Payable			
Net Worth (Owner’s Equity)			
<b><i>Employment Information</i></b>			
Total Number of Full-time Employees			
Total Number of Part-time Employees			

For large companies with multiple divisions or business units, please clearly identify the reporting entity for which financial and employment information is being presented. Please provide data for the lowest level corporate entity for which such data are available, corresponding to the entity in which the proposed R&D project is to be performed. The

information provided will be used as a consideration for selecting projects and as a source of information for determining if advanced payments will be approved for awarded projects.

In some cases the term “matching funds” is used instead of “cost share.” For purposes of this solicitation, the terms can be used interchangeably.

## 5.9 SECTION VI: Cost Share

### 5.9.1 Cost Share Explanation

This section should explain in detail the sources of cash and amounts to be used for cost sharing requirements and the specific in-kind contributions proposed, their value in monetary terms, and the methods by which their values were derived. In addition, the section should describe how the proposed cost share is applicable to the proposed statement of work. Note that NSRP ASE Program evaluators will perform their own evaluation based on the information that the proposer presents in this section, as well as in the following section, and in accordance with the cost share quality rating methodology described in Attachment 3 of this Proposal Preparation Kit.

### 5.9.2 Cost Share Detail Sheet

In addition to a detailed, narrative explanation, each proposer shall submit a Cost Share Detail Worksheet (use form in Attachment 1) in which each cost share element is described, the proposed value is listed, a quality rating is proposed, and a valuation technique is assigned and explained thoroughly.

- **Labor hours by labor category should be provided for all cost shared labor.**
- Any proposed IR&D cost share should be identified separately as such and not included in Overhead totals.
- SBIR and STTR proposed cost share contributions should also be identified separately as such and should indicate project title, phase, and funding office.
- In calculating Type A and Type B matching funds, the methodology described in the “Matching Funds Origins” section to follow should be utilized, using the most recent year’s revenue to calculate the gross revenue fraction.
- The total cost share reflected on this worksheet should equal the total amount shown on the Cost Proposal Summary Sheet.
- When applicable, provide a listing and discuss other public-sector participant provided funding (formerly called ‘donated services’) which is not allowable as cost share, but which is being provided to ensure the success of the project. Include this information on the Cost Share Detail Sheet in the area provided.

### 5.9.3 Cost Share Guidance

#### Goals

The total industry cost share for this Program is expected to exceed a one-to-one match (i.e., 50% of total program costs) for Government-provided funding. To the maximum extent practicable, industry-provided matching funds must come from non-Federal sources (Type B Matching Funds as defined under “Matching Fund Origins” section to follow). It is recognized that many proposers may be engaged in exclusive Government work, thereby reducing the sources of non-Federally reimbursed (Type B) funds. The offeror may therefore elect to

include Federally reimbursed sources of funds (Type A Matching funds as defined under “Matching Fund Origins” section to follow) as matching funds, but these costs must be identified separately. Where and to the extent the offeror cites Type A funds toward meeting the “sharing” or “matching” goals specified, this does not and need not constitute “cost sharing” as defined under DoDGARS 37.530. Decisions on the merits of individual industry-wide NSRP ASE proposals will include consideration of the cost share approach, including estimated implementation costs for project participants. Decisions on the merits of *individual* NSRP ASE proposals will include strong consideration of the cost share approach and degree of cost share proposed. “Shipyard-specific” proposals must provide more than the program goal (i.e., greater than 50% of total R&D effort).

### Cost Share Sources

The following list provides allowed sources of matching funds in order of preference.

- a. Cash (including donations from state or local governments)
- b. Labor costs (including labor-related fringe benefits)
- c. Expenses associated with allowable labor cost categories that are not billed directly to program funds
- d. Independent Research and Development (IR&D)
- e. Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) in accordance with Government guidelines  
(NOTE: Federally-funded [Phase III SBIR/STTR](#) projects cannot be used as cost share)
- f. Overhead (excluding labor related fringe benefits)
- g. General and Administrative Services (G&A)
- h. Manufacturing and Production Engineering (M&PE)
- i. Implementation Costs included in participant proposals
- j. Use of equipment (including software) - Technology transfer activities
- k. Intellectual property (market value) – explain in detail and thoroughly justify how the evaluation was derived
- l. Space (land or buildings)

In addition to the sources described above, the following are acceptable cost share:

- ECB meeting attendance and preparation
- Ship Production (SP) Panel meeting attendance and preparation
- Major Initiative Team Leader participation.

Cost share from these sources will be reported in the year they are incurred as that part of that year’s overall program cost share. Companies that provide this type of cost share will be allowed to credit the value to their project proposals where cost share is a criterion for award. This credit will apply to source selection only. A discussion of Cost Share Quality Rating can be found at the end of this section.

### Cash versus In-Kind Cost Share

Cash cost share is favored over in-kind cost share as it demonstrates greater commitment.

### CASH or Cash Equivalent Cost Share

The definition of cash cost share is outlays of funds to support the total project through acquiring material, buying equipment, paying labor (including fringe benefits and direct

overhead associated with that labor), and other cash outlays required to perform the statement of work. Labor costs and expenses associated with allowable labor cost categories that are not directly billed to the program funds may also be used as cost share. Cash is additional funds brought to the project which permit more research to be accomplished, and therefore, is valuable to the project.

- Independent Research and Development (IR&D) and Manufacturing and Production Engineering (M&PE) funds may be used **if the funding expended runs concurrent to the proposed project period of performance**. IR&D funds may be used as a source of cash when appropriate and relevant to the Statement of Work, even though they remain eligible for reimbursement by the Government. Similarly, M&PE funds may be used if directly in support of the NSRP ASE program. The offerors must clearly explain how the IR&D or M&PE efforts are relevant to the project.
- Cash can be derived from any source of funds within the accounting system. Cash contributions may include revenues from any non-Federal source, including non-Federal contracts or grants, donations from state or local governments, or funds from venture capitalists.
- Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR), although Federally funded, may be used for cost sharing in accordance with regulation and Government approved guidelines. However, federally-funded Phase III SBIR and STTR projects may not be used for cost sharing under the NSRP ASE Program.
- Overhead (excluding labor related fringe benefits), General and Administrative costs, and certain estimated implementation costs for project participants are also sources of cash cost share.
- Costs of prior research are not allowable.

The offerors should provide sufficient evidence of the existence of cash or commitments to provide cash in the future. Cash contributions from outside sources require written affirmative statements of funding availability.

### **IN-KIND Cost Share**

In-kind cost share is defined as the reasonable value of equipment, materials or other property used in the performance of the statement of work. In-kind contributions are sometimes hard to value (such as space, use of equipment, and intellectual property).

- The in-kind value of equipment (including software) cannot exceed its fair market value and must be prorated according to the share of its total use dedicated to carrying out the project.
- The in-kind value of space (including land or buildings) cannot exceed its fair rental value and must be prorated according to the share of its total use dedicated to carrying out the project.
- A general test for determining whether a cost qualifies and the amount to be considered for an in-kind transaction follows:
  - Is the resource under the control of or used by a Program Participant in conducting project research? If so, does it actually help with the project; is it germane to the overall statement of work?

- Does the contribution represent a real loss of opportunity cost to the Program Participant, either now or in the future?
- What is the fair market value of the resource?

The following principles should be used for Property contributions:

- **Intellectual property:** When considering in-kind contributions for intellectual property, evaluators will consider the following: Is it central to the project? Is it a real or incidental resource? What is the market value of the intellectual property rights lost by sharing or using those rights under the project? Explain in detail and thoroughly justify how the evaluation was derived.
- **Property:** General-purpose property necessary to the performance of proposal should generally be included in the proposer's overhead pool. This approach simplifies the issues of ownership and title of property. The amount that may be counted toward the project's cost match is limited to that portion of the overhead applied to the proposal that reflects the depreciation of that property over the life of the proposal. Where special-purpose property is necessary for the performance of the agreement and it is not appropriate to acquire the items with program funds, for cost share purposes, the NSRP ASE Program will count the total cost of the property when it will be consumed in the performance of the program and fully depreciated by the end of the program, or when the Program Administrator will approve disposition of the property at the completion of the program. The total cost of property would be counted as a cash contribution at the time of property acquisition. An indication of how the property will be used, the percentage of time it will be used over the period of the program, and the fair market value of the property and how it was determined should accompany proposed in-kind contributions and be detailed in Section VI of the Cost Proposal. When determining the value of equipment, including software, the base for the equipment depreciation will be the purchase cost for the new equipment and the net book value for previously purchased equipment. The value of equipment will be further prorated according to the share of total use dedicated to carrying out the project. The depreciation method to be used for cost share determination will be the internal depreciation accounting method used by the proposing organization.

### **Matching Fund Origins**

The allowable matching fund sources defined previously may originate from a mix of Federal and non-Federal sources. To meet the goal of deriving these funds from non-Federal sources to the maximum extent practicable, matching funds must be tracked and reported according to their origins as follows:

#### Type A Matching Funds

Definition: Private-sector funding of NSRP includes labor and other resources for NSRP projects that are billed to indirect pools (overhead) which are funded by revenue from cost-plus type contracts with Federal customers.

#### **Allowable match sources under Type A:**

- A 'gross revenue fraction' of resource billing to indirect cost pools calculated as follows:  
At the start of each NSRP project phase, participants calculate gross revenue percentages for their company (Federal vs. non-Federal revenue at the close of their most recent fiscal year). Throughout the ensuing phase, the participant uses

this fraction to estimate allocation of their cost match from indirect cost pools to Federal sources (Type A match) vs. non-Federal sources (Type B match) in quarterly project business status reports.

- SBIR and STTR in accordance with Government guidelines (NOTE: Federally-funded Phase III SBIR/STTR projects cannot be used as cost share)
- The portion of M&PE (Manufacturing and Production Engineering) funding pools reimbursed from Federal sources.
- Matching funds that might fall into Type B if it were practicable to document non-Federal pedigree, but is reported as the more conservative Type A due to complexity or risk of doing so.

### Type B Matching Funds

To the maximum extent practicable, matching funds should come from Type B sources.

Definition: Private-sector funding of NSRP activities that include commercial sources and several narrow categories of Federally-reimbursed costs that are allowed as cost share as an incentive for industry to invest in these areas, that includes accounting lines which would otherwise be profit (including firm fixed price contracts), and the fraction of project resources charged to indirect pools that are reimbursed with revenue from non-Federal contracts.

### **Allowable match sources under Type B:**

- Direct billing to any non-Federal contract / customer
- Project resources billed to firm fixed price contracts with any customer (including the Federal government)
- Profit
- A 'gross revenue fraction' of resource billing to indirect cost pools calculated as described for Type A above
- IR&D
- The portion of M&PE (Manufacturing and Production Engineering) funding pools reimbursed from non-Federal sources
- Intellectual property owned by the private sector

### **Unallowable Cost Share Sources**

Contributions not allowed include foregone fees and/or profits for the instant efforts; costs previously incurred, i.e., past expenditures in developing technology or intellectual property, past IR&D or M&PE expenditures, cost of preparing proposals, and the cost of work done on past or concurrent government contracts, unless authorized by a specific statute.

### **Cost Share and Risk**

The proposal should demonstrate a commitment to share the cost and risk of the proposed effort with the NSRP ASE Program Office. The actual dollar values for the individual cost shared items should be contained only in the cost proposal, not in the technical proposal. A discussion of any business risks, other than cost sharing, should be contained in the technical proposal. This could include any changes to corporate strategies, long-term commitment of resources, or other consequential changes. A cost share quality rating methodology for proposal evaluation purposes is described in Attachment 3 of this document. The rationale for this quality rating is that higher quality cost share is indicative of stronger offeror commitment and higher risk.

### **Other Public-Sector Participant Provided Funding**

When applicable, provide a listing and discuss other public-sector participant provided funding (formerly called 'donated services' from naval shipyards & Federal labs) which are not allowable as cost share, but which are being provided to ensure the success of the project. Include this information on the Cost Share Detail Sheet in the area provided.

### **Cost Share Quality**

Only that portion of proposed cost share that is expected to meet government acceptance (termed "allowable cost share") will be considered. The Program Administrator will assess allowability based on the criteria discussed herein and the information provided by proposers.

- Evaluators will use the QUANTITY of cost share as a measure of the proposer's commitment, such that proposals with higher cost share are viewed more favorably under the Best Value criteria.
- Evaluators will also consider the QUALITY of proposed cost share (described below) as a measure of the proposer's commitment, such that proposals with higher quality share are viewed more favorably under the Best Value criteria.
- In general, for evaluation purposes, cost share will be broken into four categories:

#### High

In general, high quality cost share is cash to pay for labor, materials, equipment, subcontracts - activities used directly on the statement of work of the project and dedicated to that statement of work by the program management. This is the highest quality cost share because of the ease with which it is valued and the risk that bears directly on the project. The value and proposal relevance of the cost share is very clear. In particular, Federally reimbursed IR&D and M&PE funds can count as high-quality cost share as long as the R&D cost is **relevant** to the research. M&PE funds must be directly in support of the NSRP ASE program.

#### Moderate

Moderate quality cost share is typically ***in-kind, non-cash resources that are used directly on the project's statement of work by the project management***. The direct use and/or the actual value of these types of contributions tend to be harder to evaluate than cash. Examples of costs in this category are wear-and-tear and prorated value cost on in-place assets such as, equipment and software. Another example of moderate cost share is estimated implementation costs by shipyards **participating in the projects**.

#### Low

Low quality cost share consists of ***resources not under direct control of the program management*** and, therefore, not contributing directly to the statement of work. Examples of low quality cost share include intellectual property and other ongoing projects that might be useful to the statement of work but are not under control of the project management.

*Note: Cost share in all three of the categories above is expected to be acceptable to the government as a contribution to total NSRP ASE Program cost share.*

#### Poor / Unacceptable

Poor quality cost share is cash or in-kind resources whose relevance to the project is not clearly or convincingly demonstrated and is ***not expected to be acceptable to the***

***government.*** The cost-sharing contributions defined as “poor” are those where the contribution, risk, control, or value is unclear or non-existent. It is often very difficult to understand their precise contribution to the project and/or risks undertaken by the proposer in supplying these resources. Other examples of poor cost share are foregone profits or fees and foregone G&A and overhead costs applicable to other projects.

## **ATTACHMENT 1 – COST PROPOSAL FORMS**

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Click here to download the [Cost Proposal Forms](#) by Phase (Cost Proposal Summary Sheet, Program Cost Share Detail Sheet, and Project-Funded Costs by Task) in Excel format.

**NSRP ASE Program Cost Proposal Summary Sheet**

Organization Name: \_\_\_\_\_

Project Name: \_\_\_\_\_

PHASE I From _____ To _____				PHASE I TOTALS	PHASE II From _____ To _____				PHASE II TOTALS	PHASE III From _____ To _____				PHASE III TOTALS	PHASE I - III TOTALS
PH I - Q1	PH I - Q2	PH I - Q3	PH I - Q4		PH II - Q1	PH II - Q2	PH II - Q3	PH II - Q4		PH III - Q1	PH III - Q2	PH III - Q3	PH III - Q4		

<b>NSRP ASE Program-Funded Costs</b>																
Direct Labor (including fringe)					\$0					\$0					\$0	\$0
<i>Labor Hours</i>					0.0					0.0					0.0	0.0
Travel					\$0					\$0					\$0	\$0
Team Members					\$0					\$0					\$0	\$0
Subcontractors					\$0					\$0					\$0	\$0
Material/Equip.					\$0					\$0					\$0	\$0
Other Direct Cost					\$0					\$0					\$0	\$0
Indirect Cost					\$0					\$0					\$0	\$0
<b>Subtotal - Prog.-Funded</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Program Funding for Government Participants					\$0					\$0					\$0	\$0
<b>TOTAL - Prog.-Funded</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

<b>Cost Share</b>																
Cash					\$0					\$0					\$0	\$0
In-kind					\$0					\$0					\$0	\$0
<b>TOTAL - Cost Share</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Total Program without Program Funds for Government Participants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
---	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Program-Funded Cost Percentage #DIV/0!  
 Cost Share Percentage #DIV/0!

<b>TOTAL PROGRAM</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
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<b>Public-Sector Participant Provided Funding</b>																
Cash					\$0					\$0					\$0	\$0
In-kind					\$0					\$0					\$0	\$0
<b>TOTAL - Public-Sector Participant Provided Funding</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

National Shipbuilding Research Program

Proposal Preparation Kit

NSRP ASE Program-Funded Costs by Task

Organization Name: \_\_\_\_\_

Project Name: \_\_\_\_\_

PHASE I From _____ To _____				PHASE I TOTALS	PHASE II From _____ To _____				PHASE II TOTALS	PHASE III From _____ To _____				PHASE III TOTALS	PHASE I - III TOTALS
PH I - Q1	PH I - Q2	PH I - Q3	PH I - Q4		PH II - Q1	PH II - Q2	PH II - Q3	PH II - Q4		PH III - Q1	PH III - Q2	PH III - Q3	PH III - Q4		

NOTE: This spreadsheet should contain program-funded costs only; do not include any cost-share on this spreadsheet.

TASK 1:					\$0					\$0					\$0	\$0
TASK 2:					\$0					\$0					\$0	\$0
TASK 3:					\$0					\$0					\$0	\$0
TASK 4:					\$0					\$0					\$0	\$0
TASK 5:					\$0					\$0					\$0	\$0
TASK 6:					\$0					\$0					\$0	\$0
TASK 7:					\$0					\$0					\$0	\$0
TASK 8:					\$0					\$0					\$0	\$0
TASK 9:					\$0					\$0					\$0	\$0
TASK 10:					\$0					\$0					\$0	\$0
TASK 11:					\$0					\$0					\$0	\$0
TASK 12:					\$0					\$0					\$0	\$0
TASK 13:					\$0					\$0					\$0	\$0
TASK 14:					\$0					\$0					\$0	\$0
TASK 15:					\$0					\$0					\$0	\$0
TASK 16:					\$0					\$0					\$0	\$0
TASK 17:					\$0					\$0					\$0	\$0
TASK 18:					\$0					\$0					\$0	\$0
TASK 19:					\$0					\$0					\$0	\$0
TASK 20:					\$0					\$0					\$0	\$0
TOTAL COSTS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

**SAMPLE NSRP ASE Program Cost Share Detail Sheet**

**Organization Name:** \_\_\_\_\_

**Project Name:** \_\_\_\_\_

**Cost Share**

Item #	Quality Rating IAW Attachment 3 (List high to low)	Description	Proposed Value *		Valuation Technique
			Type A	Type B	
1	High	Labor costs associated with proposed effort, but not billed	\$24,000	\$6,000	Engineer = 300 hrs, Designer = 200 hrs, Manager = 100 hrs
3	High	IR&D projects in the area of Systems Technologies		\$50,000	Estimated cash expenditures for direct labor and associated indirect costs for proposed project period of performance
4	High	Travel (10 trips)	\$12,000	\$3,000	Prior travel costs/experience
5	High	STTR funds - "XYZ" Phase II project funded by NASA	\$25,000		% of actual STTR funding concurrent with proposed project period of performance
6	High	Unbilled Indirect Costs associated with proposed labor	\$12,000	\$3,000	Approved OH rate applied to 2,500 hours
7	Moderate	In-kind Software (2 licenses of XYZ software & maintenance)	\$5,000		Catalog pricing data including software maintenance and support at the standard list prices prorated for each phase of the project
8	Moderate	In-kind Material (existing laser)	\$25,000		Current depreciated value of laser prorated according to the share of total use on project
<b>Total Cost Share by Type</b>			\$103,000	\$62,000	
<b>TOTAL COST SHARE</b>			\$165,000		**

\* Note: This example assumes that the gross revenue percentage for the most recent company fiscal year was 80% federal business, 20% non-federal. **The gross revenue percentages for each team member must be provided.**

\*\* Note: This amount must match the total cost share on the Summary sheet.

**Public-Sector Participant Provided Funding**

Item #	Description	Proposed Value	Valuation Technique
1	Labor provided by U.S. Naval Shipyard	\$15,000	Engineer = 200 hrs
2			
3			
<b>TOTAL PUBLIC-SECTOR PARTICIPANT PROVIDED FUNDING</b>		\$15,000	

**NSRP ASE Program Travel Breakdown**

Organization Name:

Project Name:

Phase: \_\_\_\_\_

Quarter	Departure City	Arrival City	Number of People	Length of Stay		TOTAL	PURPOSE/ JUSTIFICATION OF TRIP
				Days	Nights		
<b>TOTALS</b>						\$ -	

Phase: \_\_\_\_\_

Quarter	Departure City	Arrival City	Number of People	Length of Stay		TOTAL	PURPOSE/ JUSTIFICATION OF TRIP
				Days	Nights		
<b>TOTALS</b>						\$ -	

Phase: \_\_\_\_\_

Quarter	Departure City	Arrival City	Number of People	Length of Stay		TOTAL	PURPOSE/ JUSTIFICATION OF TRIP
				Days	Nights		
<b>TOTALS</b>						\$ -	

Government per diem, or similar regulations, should be used as a guideline for lodging and subsistence costs.

## **ATTACHMENT 2 – BUSINESS CASE TEMPLATE/EXAMPLE**

The two files linked below illustrate a strategy for developing a business case for an NSRP proposal as presented at the October 2010 Proposal Writing Workshop.

Note that the spreadsheet calculation is specific to the example discussed in the business case presentation, and represents an extreme case in terms of the amount of detail provided. It is recognized that not all R&D project proposals will lend themselves to this level of detail; however, the concepts and procedures for developing the business case are generic and applicable to any type of proposal.



Business Case  
Example for PPK.ppt



Business Case  
Template for PPK.xls

# Appendices

## **APPENDIX A – RESEARCH ANNOUNCEMENT PROCESS OVERVIEW**

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### **Definition**

Research Announcements (RAs) provide a method of contracting for research and development (R&D) based on notices posted on [Federal Business Opportunities](#) (FedBizOpps). An RA is general in nature, identifying areas of research interest, indicating criteria for selecting proposals, and soliciting the participation of all offerors capable of satisfying the NSRP's needs. The RA technique is used when meaningful proposals with varying technical/scientific approaches can be reasonably anticipated.

### **Purpose**

RAs are used when the NSRP ASE Program desires new and creative solutions to problem statements and/or advances in knowledge, understanding, technology and state of the art. The NSRP ASE Program generally states its objectives in terms of areas of need or interest rather than specific solutions or outcomes. RAs are used rather than formal Requests for Proposal (RFPs) because of their flexibility.

### **Characteristics**

The characteristics of the NSRP ASE RA process are as follows:

- RAs encourage creative and unique ideas by giving offerors the flexibility to propose solutions to stated industry-wide problems.
- Offerors may respond to all or part of the areas of interest or problems in the announcement.
- The NSRP ASE Program may choose to procure all or part of an offeror's proposal.
- The offeror defines the Statement of Work (SOW).
- The program point of contact may initiate communication with offerors.

### **Research Announcement Publication**

The RA posted on [FedBizOpps](#) represents the official notification to prospective offerors of a potential NSRP ASE Program acquisition. This posting will be paralleled by a posting on the [NSRP website](#) which will contain full and complete solicitation information.

An *example* Research Announcement will be available on the [NSRP website](#) throughout the year, even when there is no active solicitation, so that interested parties can evaluate future participation terms. Actual Research Announcements can be located on the [FedBizOpps](#) site (on the homepage, type "NSRP" in the "Keyword/Solicitation #" field, then click search). The announcements include a point of contact who can provide additional assistance if needed. Potential proposers are encouraged to make contact with the listed individuals for possible clarifications via email. The following sections are intended to clarify those areas that usually generate the most questions from proposers.

### Solicitation Revisions

Changes to the FedBizOpps announcement will only be made by publishing a revision (amendment) to the website. Amendments to an announcement may be used to extend proposal due dates or clarify requirements. They may be used to change or modify existing minor technical requirements. A new announcement may be issued and the old one canceled if the requirements change substantially. Offerors should carefully monitor [FedBizOpps](#) subsequent to the original posting, up to the time of the proposal due date. Any revision will appear in the same section of the website as the original announcement.

### Supplemental Information

#### Proposal Preparation Kit

The FedBizOpps announcement references a supplemental package (this document) that specifies the complete technical requirements and provides additional proposal instructions not included in the RA. The RA supplement provided herein is electronically published and contains useful and necessary information to help the contractor submit a competitive proposal. Information contained in the supplemental package is not posted on [FedBizOpps](#) generally because the effort is too complex to describe within the size restrictions of the announcement.

#### Past Awards

The [NSRP Project Book](#) contains detailed information on current and previous Program awards. Offerors are encouraged to review these for awareness of ongoing efforts. An [Implementation Study](#) (also available on the NSRP website) provides information on NSRP ASE project implementations at U.S. shipyards, the enablers that account for NSRP's high rate of successful R&D transition to implementation, and the barriers that inhibit more extensive and/or more rapid nationwide implementation. Offerors are encouraged to review the Implementation Study, particularly the enablers/accelerators and barriers to successful project implementations.

#### NSRP Website

Proposers are encouraged to access the [NSRP website](#) to review program information. The website contains descriptions of [current projects](#), [benchmarking results](#), guidelines and templates for developing an effective [Project Management](#), [Technology Transfer](#), and, if applicable [Software Development](#) Plans, and other valuable information.

The NSRP website also has copies of the NSRP ASE Program Technology Investment Agreements (TIA). **Proposers must certify on the cover page of their proposals that, if selected for award, they will abide by the terms and conditions of the latest version of the NSRP ASE TIA (see Section 2 for additional information).**

### Two-Step Research Announcement Process

Under a two-step process designed to reduce resource requirements for both the NSRP and proposers, potential offerors are required to submit brief descriptive abstracts by a date specified in the Research Announcement posted on [FedBizOpps](#). Specifics on abstract submission and feedback can be found in Section 3 of this document.

## National Shipbuilding Research Program

### Proposal Preparation Kit

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In the second step, any offeror who submitted an abstract may submit a full proposal but is not obligated to do so. All proposals are then evaluated as a group.

### Response Times

NSRP ASE Research Announcements posted on [FedBizOpps](#) will indicate a proposal due date, which will also be prominently posted on the [NSRP website](#). The due date/deadline will normally be no less than 60 days after the FedBizOpps posting. Proposals may be submitted any time between the FedBizOpps announcement and the due date. The proposal due date can only be changed through a formal modification of the FedBizOpps posting. Both the technical and cost proposals are due on the same date, as cost and technical proposals are reviewed concurrently.

**The published proposal due date is firm.** Late proposals will **not** be accepted. Requests for extensions have never been granted by this Program.

### Communication with the NSRP ASE Program Office

Proposers may address questions via email to the Program Administrator's Contracts POC identified in the Research Announcement.

### Multiple Awards

NSRP ASE Research Announcements will normally result in multiple awards. Estimated total RA funding targets may be included in the FedBizOpps announcement, but individual project funding is not predetermined. Occasionally, however, NSRP may award only one or more parts of a proposal rather than acquiring the entire proposal. Multiple awards are generally made based on the quality of the proposals and availability of funding. The RA method provides the flexibility to make an award for only those portions or tasks of the proposal that are of interest to the NSRP. Proposers will be notified in writing if the NSRP intends on making an award based on the proposal. The notification will indicate what portion(s) of the proposal will be included in the award. Due to limited funding, the NSRP ASE Program reserves the right to limit awards under any topic, and only proposals considered to be of superior quality will be funded. The NSRP ASE Program reserves the right to select for award any, all, part, or none of the proposals received.

In most RAs, awards are usually made only to those projects selected for award through the competitive process. However, because of the uniqueness of the RA evaluation process, it may be the case that while an overall proposal may be ranked as an alternate proposal, a certain part of the proposal may be determined to be particularly important to the program objectives. In this case the flexibility of the RA process (mentioned in the preceding paragraph) will allow the NSRP to make an award for that portion of the proposal that is of high interest to the NSRP ASE Program. It may also be the case that another similar program or government agency may be interested in the proposed approach (or a portion of the proposal) and provide funds to make an award for the effort. Once again, the flexibility of this process allows NSRP to make awards (or recommendations to other award sources) in these instances.

### Source Lists

Due to the nature of the RA solicitation, there is no “source list” or “bidders list.”

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### **Discussions and Best and Final Offers**

The program reserves the right to make awards without discussion. While award without discussion is anticipated and the use of Best and Final Offers (BAFOs) is not expected, NSRP reserves the right to negotiate the cost and scope of the proposed work with the proposers that have been selected to receive awards. For example, NSRP may request that the proposer delete from the scope of work a particular task that is deemed to be inappropriate for NSRP support.

### **Contractual Vehicle**

The contractual vehicle used to fund the awards will be a Technology Investment Agreement (TIA). Proposers may choose either a Cost Reimbursable Milestone Payment Method or an Adjustable Fixed Price Milestone Payment Method TIA. The most recent version of both types of TIAs can be found on the [NSRP website](#). Any modifications to the TIA will be posted on the NSRP website. Proposers should periodically visit the site for potential updates. Proposers are advised to contact the NSRP contractual POC listed in the RA if they have any questions on this requirement.

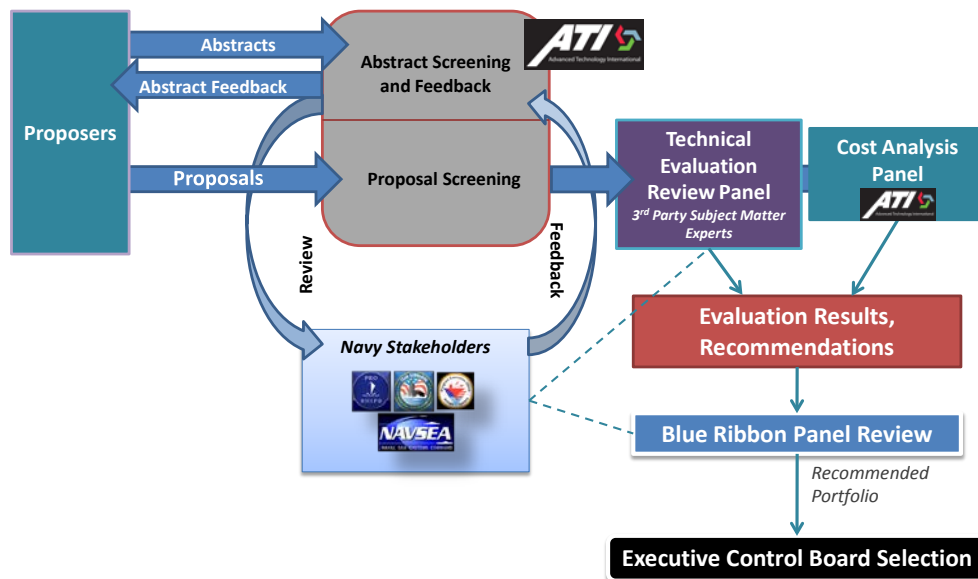
### **Government furnished equipment or property**

No Government furnished equipment or property is expected in this program.

## APPENDIX B – PROPOSAL EVALUATION, SELECTION AND AWARD

### General

Proposals submitted in response to RAs will be evaluated solely on the criteria posted on [FedBizOpps](#), as amplified by available, published supplementary information. The proposal shall stand on its own as submitted. The selection process (as shown in **Figure B-1**) for awards is a multi-step, formal source selection process based on the evaluation factors disclosed in the RA and further detailed in this proposal preparation kit. Initial screening will be performed by the Program Administrator. A Technical Evaluation Review Panel (TERP) and a Blue Ribbon Panel (BRP) are used (as described herein) to ensure that all proposals receive fair and equitable consideration. This process uses a combination of scoring and subjective assessments. Proposals will be evaluated by a team of personnel drawn from industry, academia, and government or as otherwise specified in the RA. In some cases, outside consultants may assist in proposal evaluation. Procedures require conflict-of-interest disclosures and non-disclosure agreements by all personnel handling proposals.



**FIGURE B-1 NSRP ASE PROPOSAL SELECTION OVERVIEW**

### Initial Screening

In the first step, called “initial screening”, proposals that do not meet the requirements of the Research Announcement will be eliminated. Typical (but not all-inclusive) reasons for eliminating a proposal at this stage include: the proposal is deemed to have serious deficiencies in either the technical or cost proposals, does not comply with key format and content requirements, is significantly overpriced or under-priced given the scope of the work, or does not meet the requirements set out in the Research Announcement. The NSRP Proposal Checklist ([Appendix D](#)) is a key tool in ensuring compliance and successful screening.

The following items are primary reasons for **non-compliance and elimination during screening**:

- Proposals without an affirmative response to the cover page certification of agreement to abide by the terms and conditions of the current Technology Investment Agreement (available on the NSRP website).
- Failure to include sufficient discussion on technology transfer and implementation plans.
- Non-inclusion of mandatory tables and information.
- Non-submission of ALL required cost proposal data.

### Technical and Cost Review

In the second step, proposals are evaluated. The Technical Evaluation Review Panel (TERP), a group of non-shipyard, third-party subject matter experts, grades each proposal against pre-determined criteria using a numerical scale, assigns a final overall grade, and rank-orders all proposals reviewed. The TERP also identifies specific strengths, weaknesses, omissions and risks, and makes recommendations for Blue Ribbon Panel (BRP) consideration. The TERP may also recommend questions to be asked of the proposers to elicit clarifying information for the BRP to consider.

Before and during the technical evaluation described above, the Cost Analysis Panel (CAP) conducts the cost evaluation. The results of the CAP are summarized and provided to the BRP for consideration along with the TERP results.

Proposals judged to have the highest merit based on the technical are referred to as being in the Competitive Range and normally receive further consideration by the BRP. The Competitive Range may include all proposals reviewed by the TERP, or some subset thereof. The Competitive Range is established by the Executive Director after consideration of the number of proposals, available funding, time constraints on the selection process and feedback from any independent review of proposals by Navy sponsors. In setting the Competitive Range, the Executive Director will determine location of a cut-off line in the TERP rank-ordered list, but will not re-order the rankings.

### Evaluation of Competitive Range Proposals

In the final step, referred to as “selection of recommended recipients,” the Blue Ribbon Panel (BRP) performs an independent comparative assessment of competitive range proposals including a total, program-wide Best Value decision with appropriate tradeoff of technical and cost factors. The goal of this step is to ensure that the overall portfolio of selected projects is consistent with the priorities documented in the Research Announcement and Strategic Investment Plan.

## National Shipbuilding Research Program

### Proposal Preparation Kit

The Blue Ribbon Panel uses a portfolio management approach to ensure that the source selection process meets three important criteria: (1) a high return on investment, (2) a balanced portfolio, and (3) coherence with the strategic direction of the industry and the Navy customer. Consideration includes the balance between high and low risk strategies, technology maturity and potential competitive impact, available funding, and strategic fit with the industry/Navy vision.

The NSRP ASE Program is strategically targeted to support and expand existing business, drive new business, and broaden and deepen the industry's development and implementation of advanced technology. The selection process should emphasize collaborative team projects that target the key top-level cost drivers for the industry, yet provide funding for an appropriate number of projects to support NSRP mission execution.

The BRP-developed portfolio of recommended projects is then presented to the Executive Control Board (ECB) for approval, along with a prioritized list of technically-worthy projects for which funding is not presently available. The ECB may approve or reject the portfolio as a whole or—under well-defined procedural restrictions—amend the BRP's recommendations on individual projects.

### **Oral Review**

For proposals in the competitive range, proposers will be required to attend an oral review with the Blue Ribbon Panel at Advanced Technology International in Charleston, South Carolina. Proposers may have up to four representatives present. The Oral Review focuses on technical and business questions. All proposer costs associated with participation in the Oral Review will be the responsibility of the proposer. The exact date and time will be provided approximately two weeks in advance, and specific questions to be addressed by the proposer during the review will be provided shortly thereafter. In addition to answering these questions, the proposer will be expected to provide a 15-minute summary of the proposed project using the technical proposal Executive Summary, and answer any other questions that might be raised by the Blue Ribbon Panel. The total time with the Blue Ribbon Panel should not exceed one hour. In addition to the Oral Review with the Blue Ribbon Panel, proposing team representatives will meet with the NSRP ASE Program Director of Contracts to address cost issues and answer any remaining Cost Proposal questions. Proposers will be required to provide their Schedule of Payments and Deliverables (see guidance in Attachment 3 of the [Technology Investment Agreement](#)). Proposers will also be required to provide their estimated expenses for the Letter Contract period at this time. This review should also take no longer than one hour. An authorized contractual representative from the Offeror must be present for the Contract portion of the Oral Review.

### *Use of Visual Aids at Oral Reviews*

Feedback received from past solicitations has shown that limited visual aids improve presentations given by proposers during oral reviews. In order to enhance presentations, visual aids, with some restrictions listed below, are allowed. All teams are encouraged to bring visual aid(s) as appropriate, but it is not required.

- Due to time limitations, visual aids can not include any electronically displayed media that requires projection such as slides, computer animated models, etc. that require set-up time.

## National Shipbuilding Research Program

### Proposal Preparation Kit

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- Acceptable visual aids can include: a physical model, photographs, graphical depictions of concepts or project flows, etc.
  - Each visual aid can be presented as a placard or poster (an easel will be provided) and/or as a one-page handout (without significant text beyond labeling necessary for clarity). Some members of your audience will be as far as 15 feet away, so poster-style visual aids need to avoid small font size, “busy” diagrams and glossy surfaces that reflect glare. 8.5” x 11” hard copies of poster-style visual aids are encouraged. Eight copies of each handout should be provided.
  - Up to 4 different visual aids (1 of each) can be presented.
  - Presenters are still limited to 15 minutes with or without visual aids.
  - The visual aids can be used during the presentation and/or during the Q&A process with the Blue Ribbon Panel.

### Award Process

For those proposals that are approved for award by the ECB, a letter contract will be executed within 2 business days after the selection meeting. This letter contract will normally be for a period of 30 days (perhaps longer in some cases, but not more than 90 days—see the Research Announcement for additional information), for the amount previously agreed to between the proposer and the Program Administrator to conduct project kickoff activities and continue work on the program management plan. All proposers, unless exceptions are authorized by the ECB for unusual circumstances (e.g., significant changes were requested to the Statement of Work), will be expected to sign the final agreement prior to the letter contract end date.

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## APPENDIX C – TECHNICAL EVALUATION FACTORS

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### Technical Evaluation Factors

The technical evaluation factors to be used in selecting proposals for funding under this program include the Qualification Factors (i.e., the initial screening process described in [Appendix B](#)), the Critical Technical Factors, and Discriminating Factors.

#### Critical Technical Factors

A peer review of proposals will evaluate the following five critical technical factors, discussed in more detail below: Strategic Fit and Leverage, Business Case, Innovation and Technical Merit, Technology Transfer and Industry Implementation, Team Strength and Management Plan.

#### Strategic Fit and Leverage

Proposals will be evaluated for their fit with the NSRP ASE mission statement, the Strategic Investment Plan (SIP), and the Research Announcement. This factor considers the strategic economic impact of the project, the degree to which it addresses industry consensus priorities, and potential for leveraging project results across the shipbuilding industry or even beyond.

A good measure of Strategic Fit and Leverage lies in the proposed approach to R&D on the research priorities. NSRP ASE targets rapid, industry-wide improvements - a goal that in many cases is best achieved by projects that exhibit one or more of the following characteristics:

- Potential for significant industry-wide impact on critical cost or cycle time drivers, such as that offered by an integrated R&D approach to one or more major, fundamental business or manufacturing processes.
- Applicable to multiple industry segments and company sizes (dynamic range across various shipbuilding/repair market segments).
- Broad participation by shipyards in particular, and their appropriate industry partners in general.
- Integration of an appropriate breadth of research priorities identified in the SIP.
- Consideration of the need for and the state of any appropriate process rationalizations that should be prerequisites for automation or advanced technologies.

There may be, in all probability, innovative opportunities proposed that do not fit this mold, but that are considered favorably if they appear to offer significant potential for realizing the NSRP ASE vision.

### Business Case

Evaluators will consider 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.

Sub-Factors:

- The degree to which there is a compelling case that the proposed technology has strong potential to generate substantial value to the Navy and industry that extend significantly beyond the direct returns to the proposing organization(s). Considerations will include the breadth of applicability to the shipbuilding industry, the level and nature of benefit provided to the industry (e.g., productivity, quality improvement, cost reduction), the potential for lead and cycle time reduction, the business impact of the technology on life-cycle cost (e.g., sustainment of aging ships), the life of the product/technology in the marketplace (years), and synergy with other operations, businesses, research, and programs.
- The need for NSRP ASE support and what difference NSRP ASE funding is expected to make in terms of what will be accomplished with the NSRP ASE funding versus without it.
- The expected returns to the proposer and to others, i.e., spillover effects. **The credibility of the proposer's justification of assumptions used and the resulting estimated benefits will be assessed.**
- Project metrics including establishing a baseline and final project goal and associated plan to realize benefits.
- Evidence of breadth and depth of industry support for the project.

***Proposals that do not express a strong, credible business case will not be recommended for award.***

### Innovation and Technical Merit

The proposed technology should be highly innovative and challenging, with appropriate technical risk, and aimed at overcoming an important problem(s) or exploiting a promising opportunity.

Sub-Factors:

- Projects should press the state-of-the-art while still having credibility with regard to technical approach. The enabling nature of the technology should be apparent. The quality, innovativeness, cost-effectiveness of the proposed technical program, and uniqueness with respect to current industry practice will also be considered. The evaluation will compare and contrast proposed approaches with those taken by other domestic and foreign companies working in the same field.
- Technical plans should be clear and concise, clearly identifying the core innovation, the technical approach, major technical hurdles, and the attendant risks with risk mitigation factors. The technical plan should be coherent, display reasonableness and clarity of vision of the technical objectives, and provide the degree to which the

technical plan meets program goals. Note: Do not interpret this discussion as a desire for only low risk proposals.

- The technical plan should address the questions of “what, how, where, when, why, and by whom” in detail, and be credibly linked to the pathway for achieving potential broad-based economic benefits and the potential broad impact on U.S. shipbuilding technology and knowledge base.
- Adequacy of and clarity of software activity plans if software development will be an element of the proposal.

### **Technology Transfer and Industry Implementation**

The implementation strategy for the proposed technology will be evaluated on the adequacy of plans for eventual implementation. Proposals that develop technology with broad application throughout the industry will be viewed more favorably than those that do not produce transferable results.

Sub-Factors:

- Evaluations will consider the potential applications of the technology and evidence that the proposer has credible plans for prompt and widespread diffusion or commercialization of the technology if the R&D is successful.
- The pathways to economic benefit realization should be identified, including the proposer's approach for getting the technology into commercial use, as well as additional routes that might be taken to achieve broader diffusion of the technology. Examples might include development and distribution of “awareness” material that educates the industry on the technology developed, its technical merits, the lessons learned, and the benefits of the proposed innovations while addressing cost, risk, and the extent of change.
- Expected success of plans to pilot innovations in a realistic context that specifically addresses organizational and cultural challenges to successful adoption (as appropriate) should be provided.
- Interoperability of resulting processes, software, or tools across the industry.
- Approach for maintenance funding for developed technology (e.g. software maintenance) after project completion.

### **Team Strength and Management Plan**

The Management Plan should include a summary Statement of Work, a project schedule with reasonable, measurable, and achievable milestones, and a discussion of the overall management approach, the team members, and organization chart.

Sub-Factors:

- Overall project duration, including discrete phases (none longer than one year and non-overlapping) and associated criteria for making a determination to proceed from one phase to another based on results. Each phase should include payable milestones that relate to specific deliverables during the phase.
- The strength of teaming arrangements, clarity of task delegation, the chain of command, as well as the extent to which those responsible for the work have

adequate authority and access to higher level management. At least one U.S. shipyard should be substantially involved in each project, normally in a leadership role. Exceptions to this may be considered on a case basis where there is compelling justification that the program mission is best served by the proposed deviation. The commitment of team members, including cost share contributions and the economic risk/exposure associated with this match, the extent to which the proposer assigns highly qualified people to the project, and the priority given to this work in relation to other company activities. Convincing evidence of commitment by team members is a key element of this evaluation factor.

- The qualifications, capabilities, and experience of the proposed management team and technical personnel who will be assigned to carry out the project. The Program will assess the proposing team's relevant experience for pursuing the technical plan. The team carrying out the work should possess an appropriate level of scientific/technical expertise to conduct the R&D and have access to the necessary research facilities.
- Past performance of the company or team members in carrying out similar kinds of efforts successfully, including technology application. Consideration of this factor in the case of a start-up company or new joint venture, will take into account the past performance of the key people in carrying out similar kinds of efforts. The Program reserves the right to deny awards in any case where a search of Federal records discloses information that raises a reasonable doubt as to the responsibility of the proposer. *Note: If prior performance becomes a reason for potential non-selection, the offeror will be contacted and provided an opportunity to rebut.*
- The amount of proposed cost share as an indicator of team commitment and strength. Project teams that are committing significant cost share to the project will be viewed more favorably on this criterion than teams providing little or no cost share.

### **Discriminating Factors**

Other key factors to be considered as discriminators include adequacy of addressing workforce impacts, cost share, proprietary content, and project execution.

#### **Workforce Impacts**

The degree to which areas such as workforce training, education, retention and cultural changes are appropriately addressed by the proposed research will be evaluated.

#### **Level of Effort Realism**

Based on the experience and subject-matter expertise of the technical evaluators, whether the total resources proposed (labor, materials, etc.—both program-funded and cost-shared) appear to be sufficient (or insufficient, or excessive) to accomplish individual project tasks and the project as a whole.

#### **Shipyard-Specific**

As noted earlier, a project that has strong potential to generate substantial value to the Navy and industry that extends significantly beyond the direct returns to the proposing organization(s) is viewed much more favorably than one that tends to be shipyard-specific with low probability of implementation in other yards.

### **Project Execution**

Due to a continuing need to meet Navy Comptroller spending benchmarks, proposers are encouraged to demonstrate evidence of a committed team ready to move out quickly upon award with an aggressive, credible execution schedule. Proposals that demonstrate such commitment will benefit during the technical evaluation process when compared to otherwise equally acceptable proposals that do not show such commitment.

### **Proprietary Content**

Most of the program funding will be applied toward open, collaborative projects which are widely acceptable with broad applicability. For this reason, most projects will be recommended for award on the basis of sharing results within the U.S. shipbuilding and repair industry. It is anticipated that some projects with limited access, and limited or delayed applicability to the broad industry will be awarded, but these projects will require substantially higher cost share. The estimated fraction of a proposed project's funding that will be used in developing technologies that will be openly shared without delay, such that a higher percentage of the results are shared, will be considered in the evaluation. Proposals with a higher degree of results that are openly shared and readily transferable throughout the industry will be viewed more favorably.

### **Metrics**

An assessment of whether the project includes relevant, measurable metrics that will clearly indicate if value is being, or will be, delivered to the Navy and industry, and if there are clear indicators on which to base go/no-go decisions between project phases.

## APPENDIX D – NSRP PROPOSAL CHECKLIST

The following items shall be included/adhered to in all proposals submitted to the NSRP ASE Program. Failure to submit the required documents and adhere to the requirements **MAY** result in the proposal being disqualified.

- \_\_\_\_\_ 1. Technical and Cost Proposal in Separate Volumes
- \_\_\_\_\_ 2. One electronic copy of a Technical Proposal on digital media (CD or equivalent, but not e-mail); paper copies optional
- \_\_\_\_\_ 3. An original signed Cost Proposal (unbound), 2 bound copies (3 total), plus 1 electronic copy
- \_\_\_\_\_ 4. Technical Proposal page count does not exceed 40 (excluding Cover Page, Table of Contents, List of Figures and Tables, Cross Reference to Evaluation Criteria, Resumes, Statement of Work, Letters of Commitment, and Teaming Agreement/Memorandum of Agreement)
- \_\_\_\_\_ 5. Proposal text is a fixed pitch font of 12 or fewer characters per inch or proportional font point size 10 or larger
- \_\_\_\_\_ 6. Cover Page identifies Proposer, Team Members and Abstract Number
- \_\_\_\_\_ 7. Proposer certifies that, if selected for award, the proposer will abide by the terms and conditions of the NSRP ASE Technology Investment Agreement dated 25 May 2011
- \_\_\_\_\_ 8. Proposer provides permission to use a technical summary of the proposal in preparing future SIP updates and research announcements
- \_\_\_\_\_ 9. The following Sections and tables are included in the Technical Volume:
  - \_\_\_\_\_ Executive Summary
    - The following **mandatory** tables are included in the Executive Summary:
      - \_\_\_\_\_ Metrics Table (also in section 5.0 of SOW)
      - \_\_\_\_\_ Participants
      - \_\_\_\_\_ Summary Work Statement and Funding Plan
      - \_\_\_\_\_ Cost Share Summary
      - \_\_\_\_\_ Key Deliverables and Criteria for Phase Continuation
      - \_\_\_\_\_ Total Man-hour Summary
      - \_\_\_\_\_ Total Material/Equipment Summary
  - \_\_\_\_\_ Technical Approach
    - \_\_\_\_\_ Background/Scope/Project Objectives
    - \_\_\_\_\_ Technical Discussion
    - \_\_\_\_\_ State-of-the-Practice
    - \_\_\_\_\_ People and Organizational Impacts
  - \_\_\_\_\_ Business Case
    - \_\_\_\_\_ Project Metrics
  - \_\_\_\_\_ Risk Management
  - \_\_\_\_\_ Implementation and Technology Transfer
  - \_\_\_\_\_ Management Section
    - \_\_\_\_\_ Management and Technical Team
    - \_\_\_\_\_ Project Organization
    - \_\_\_\_\_ Project Schedule
    - \_\_\_\_\_ Proposer's Interest
    - \_\_\_\_\_ Related Proposals

- \_\_\_\_\_ Appendices
  - \_\_\_\_\_ A. Resumes of Key Personnel (No more than 2 pages each)
  - \_\_\_\_\_ B. Statement of Work
    - \_\_\_\_\_ Scope
    - \_\_\_\_\_ Detailed Description of Task(s)
    - \_\_\_\_\_ Technical/Design Reviews
    - \_\_\_\_\_ Deliverables
    - \_\_\_\_\_ Metrics/Benefit Realization (including table)
  - \_\_\_\_\_ C. Letters of Commitment
  - \_\_\_\_\_ D. Video Presentation (OPTIONAL)
- \_\_\_\_\_ 10. Project duration is within RA guidance
- \_\_\_\_\_ 11. The following information is included in the Cost Volume (*Other spreadsheet programs may be used other than the Excel file provided, but the same information MUST be submitted in accordance with the cost proposal requirements*):
  - \_\_\_\_\_ Signed Cost Proposal Summary Sheet
  - \_\_\_\_\_ Program Cost Proposal Summary Sheet
  - \_\_\_\_\_ Program-Funded Costs by Task Sheet
  - \_\_\_\_\_ Budget Narrative Section Provided
  - \_\_\_\_\_ Labor Categories and Associated Labor Rates and Hours for Offeror's Direct Labor Costs
  - \_\_\_\_\_ List of Team Members and Total Cost for Each
  - \_\_\_\_\_ List of Subcontractors/Consultants and Total Cost for Each Subcontractor or Consultant
  - \_\_\_\_\_ Indirect Rate Certification
  - \_\_\_\_\_ Preferred Payment Method Identified
  - \_\_\_\_\_ Financial Viability Information
  - \_\_\_\_\_ Program Travel Breakdown Sheet
  - \_\_\_\_\_ Program Cost Share Detail Sheet
  - \_\_\_\_\_ Cost Share Explanation
  - \_\_\_\_\_ Sufficient Cost Data provided
- \_\_\_\_\_ 12. Format requirements (Font size, line spacing, margins ...) are in accordance with the published guidelines