

Proposal Preparation Kit

Version: 12.0 dated July 6, 2018

(Replaces Version 11.0 dated July 6, 2017)



National Shipbuilding Research Program Mission

- Manage and focus national shipbuilding and ship repair research and development funding on technologies and processes that will reduce the total ownership cost of ships for the U.S. Navy, other National Security customers and the commercial sector and develop and leverage best commercial and naval practices to improve the efficiency of the U.S. shipbuilding and ship repair industry.
- Provide a collaborative framework to improve shipbuilding and ship repair-related technical and business processes.



TABLE OF CONTENTS

1.0	Introduction	1
2.0	General Instructions.....	1
3.0	Summary Proposal.....	4
3.1	Cover Page.....	4
3.2	Technical Summary	5
	3.2.1 Synopsis	5
	3.2.2 Problem to be addressed/General Objectives.....	5
	3.2.3 Technical Approach	5
	3.2.4 Current State and Relevant Efforts	6
	3.2.5 People and Organizational Impacts	7
	3.2.6 Technology Readiness Level (if applicable)	7
3.3	Business Case	7
3.4	Technology Transfer & Implementation (Commitment to Implement and Willingness to Share) .	9
3.5	Attachment 1 – Supporting Tables	10
	3.5.1 Participants	10
	3.5.2 Summary Work Statement and Funding Plan.....	11
	3.5.3 Key Deliverables	11
	3.5.4 Total Man-hour Summary	11
	3.5.5 Total Material/Equipment Summary	11
	3.5.6 Risk Management.....	11
	3.5.7 Metrics	12
	3.5.8 Cost Summary.....	12
	3.5.8.1 Program Funding	12
	3.5.8.2 Cost Share	12



3.5.8.3 Public Sector/Participant Provided Funding.....	13
3.5.9 Financial Viability.....	13
Appendix A – Summary Proposal Supporting Tables.....	15
Appendix B – Research Announcement Process Overview.....	24
Appendix C – Proposal Evaluation, Selection and Award	28
Appendix D – Technical Evaluation Factors	32
Appendix E – NSRP Summary Proposal Checklist.....	36
Appendix F – Implementation Risk	38
Appendix G – Proposal Submission Process.....	41



1.0 INTRODUCTION

This Proposal Preparation Kit (PPK) contains background material and guidance for the preparation of proposals for the Research Announcement (RA), as well as other required forms and instructions. This PPK has been 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 National Shipbuilding Research Program (NSRP) Advanced Shipbuilding Enterprise (ASE) Program. This Proposal Preparation Kit replaces, in its entirety, the NSRP ASE Proposal Preparation Kit version 11.0 dated July 6, 2017.

Questions regarding material in this document should be referred to:

Mr. Scott Leacock, Contracting
NSRP ASE Program Administrator
Advanced Technology International (ATI)
315 Sigma Drive
Summerville, SC 29486
Scott.leacock@ati.org

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. For all NSRP funded efforts, there is a strong preference for aggressive technology transfer to, and buy-in by, multiple U.S. shipyards. The Executive Control Board (ECB), the governing body of the NSRP, includes representation from each member shipyard, with participation by the U.S. Navy and other national security customers. A high-interest program for the Naval Sea Systems Command, Naval shipbuilding program leadership, and shipbuilding industry leadership, NSRP ASE is an innovative approach in public/private cooperation to manage cost-shared R&D for technologies critical to the nation's ability to reduce shipbuilding and ship repair costs.

2.0 GENERAL INSTRUCTIONS

Note: It is recommended that proposers 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.



National Shipbuilding Research Program

Proposal Preparation Kit

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

The summary proposal should be prepared simply and economically, providing straightforward, concise delineation of capabilities necessary to perform the work being proposed. All research proposed under this program shall be subject to the terms and conditions of the NSRP Base Task Order Agreement (TOA). The following terms from the Base TOA must be considered during the development and submission of the summary proposal, if applicable:

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

- Unless otherwise specifically negotiated and approved, the Government will obtain Government Purpose Rights to all intellectual property (IP) developed under the NSRP Program including IP developed using cost share sources. Any request for specially negotiated rights other than Government Purpose Rights must be disclosed in the summary proposal for consideration and approval.
- Prior to award, the lead proposer is responsible for determining a team member/subcontractor's qualification and compliance with National Policies in accordance with Article XII of the [Base Task Order Agreement \(TOA\)](#).

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 Panel (TERP), ECB, Major Initiative Teams, Program Technical Representatives, Blue Ribbon Panel (BRP), 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 proposer 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 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's nor 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 Summary Proposal shall be limited to:

- 10 pages ***less cover page and attachments*** (font point size 10 or larger), single-spaced, single-sided, 8.5 by 11 inches. Smaller type may be used in 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 1 inch.

For further requirements on preparation of the Summary Proposal, see [Section 3.0](#).

Proposers are strongly encouraged to build their Summary Proposal around the underlying business case that demonstrates value to the Navy and industry. To that end, past experience indicates that proposal preparation will best begin with thorough consideration of the business case logic.

DO NOT SUBMIT ANY CLASSIFIED INFORMATION



3.0 SUMMARY PROPOSAL

To ensure proper consideration, **the Summary Proposal format shown below is mandatory.**

3.1 COVER PAGE

A cover page is required on the Summary Proposal, and shall include the following information and statements:

Name and address of proposer

Title of Proposal

Summary Proposal

Team Members / Subcontractors

(Identify each organization or person who will be part of the project team)

The following statement: "This proposal is submitted pursuant to *(cite the Research Announcement title, reference number, and date)*".

Duration of effort: *(in months)*

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

The following statement: "Proposer certifies that, if selected for award, the proposer will provide a full Cost Proposal in accordance with the NSRP Cost Guidelines document dated June 14, 2018 and abide by the terms and conditions of the NSRP ASE Base Task Order Agreement dated April 27, 2018, in its entirety."

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

The statement: "Technical content from this summary proposal may be used by the NSRP ASE Program and the NSRP Executive Control Board in preparing future NSRP ASE Strategic Investment Plans, Technology Investment Plans and Research Announcements."

Date of submission and **signature of an official authorized to obligate the institution contractually. If the proposer is a NSRP-member shipyard, the ECB member's signature must also be included on the cover page.**



3.2 TECHNICAL SUMMARY

The Technical 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.

3.2.1 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 included in the proposal requirements in response to evaluators' desire to be able to see "the bottom line up front.")

3.2.2 PROBLEM TO BE ADDRESSED/GENERAL OBJECTIVES

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 Research Announcement?
- What goal(s) of NSRP does your project address?
- What fundamental difference(s) in the U.S. shipbuilding and repair industry will be enabled by the successful completion of the proposed project?
- What evidence is there that government stakeholders (e.g., Navy Program Executive Office, platform program manager, technical warrant holder, Supervisor of Shipbuilding) or other stakeholders share the view that this is a problem area needing to be addressed?

3.2.3 TECHNICAL APPROACH

This section provides a summary of how the project will approach the problem, and the key innovation(s) expected from the project. 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.



Provide the following information:

- Scope, including summary of technical/process issues being addressed
- Essence of intended approach
- Technical detail and analysis to support approach being proposed.
- Project objectives that include:
 - Vision of what will be achieved
 - Solutions the effort will produce
 - Benefit metrics
- Brief description of major tasks, by task number, to permit correlation with the Man-hours and Material Cost Summary table appearing later in the Summary Proposal
- If proposing a “new and creative” solution, develop and analyze it in this section.
- If there is more than one organization involved in the technical approach, explain how they will interact with each other (e.g., relationships, inter-dependencies).
- Identify engagement with and commitments from Navy or other government stakeholders to date, as well as any planned engagement before and during project execution.
- If proposal requires sustainment funding after the project is completed, include plans/structure for obtaining that funding.

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.

3.2.4 CURRENT STATE AND RELEVANT EFFORTS

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

Discussions should include, where applicable:

- Results of/evidence of the current state of the art/literature searches and how your approach compares to other possible approaches.
- Connections to ongoing or past projects in the general technology area/process being addressed.



- For data integration/systems projects, proposers must include a discussion of the Ship Common Information Model ([SCIM](#)) and indicate why or why not SCIM is relevant to the proposed project.
- 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 Portfolio](#) for project results.

3.2.5 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
- Workforce Development (education/training) will be addressed

3.2.6 TECHNOLOGY READINESS LEVEL (IF APPLICABLE)

Identify the starting Technology Readiness Level (TRL) of the proposed process or technology, and state the predicted TRL at successful project completion. Please reference the U.S. DoD definitions found in the April 2011 [Technology Readiness Assessment Guidance](#).

3.3 BUSINESS CASE

This section describes the business opportunity that your project will address. Include likely products, target market, potential customers (e.g., specific Navy, other national security customer, or commercial 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.

Any business case requires adequate justification. 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 and ship repair industry, the level and nature of benefit to the Navy, other national security customers, 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. As



applicable, discuss benefits to be realized in the following areas and where able, a rough-order-of-magnitude measure of those benefits:

- Labor (Direct & Indirect)
- Lifecycle Operations and Support, including maintenance
- Rework
- Material & Supplies
- Cost Avoidance
- Scrap
- Schedule
- Time Value of Money
- Services
- Additional Income
- Equipment
- Increased Technology Readiness Level (TRL)
- Inventory
- Work in Progress (WIP)
- Other

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. Actual benefits realized for the indicated metrics will be included in project reports.

In order to provide for a sound, strong business case, project metrics must also be well defined and quantified so that a ROI can be calculated. The metrics discussion shall include project costs (both program funds and cost share, listed separately), estimated implementation cost, and predicted cost reductions to be realized through implementation of successful project results. Note that “cost reduction” includes both actual savings and cost avoidance, both immediate and future.

Predicted cost reductions are to be expressed in dollars, and should be based on well-defined metrics that will demonstrate a quantifiable ROI. Where exact numbers are not available, the project team should derive reasonable estimates by making—and explaining—assumptions based on historical cost information, past experience, and/or comparisons to similar innovations/processes. If applicable, generic data may be used in lieu of actual information considered to be company-proprietary. Basis and source of cost information shall be included.

A format and example for listing cost and cost reduction information from which ROI can be calculated are provided in the following table:



Inclusion of this information is mandatory.

Project Cost – [Name of Project]		
Program Funding		\$1,000,000
Cost Share		\$1,000,000
Public-Sector Participant-Provided Funding		\$0
TOTAL PROJECT COST		\$2,000,000
Implementation Cost Estimate– [Labor, Materials, Training,		
Project Team Shipyards (per yard)		\$10,000
Other Shipyards (per yard)		\$100,000
Reduction Forecast* [Savings & Cost Avoidance (Current & Future)]		
Cost Category	As-Is Baseline	Post-Implementation
Labor		
<ul style="list-style-type: none"> 30% reduced welding hours per platform 	\$10,000,000	\$7,000,000
<ul style="list-style-type: none"> 75% reduced re-work platform 	\$4,000,000	\$1,000,000
Materials		
<ul style="list-style-type: none"> 20% reduced welding consumables 	\$1,000,000	\$800,000
<ul style="list-style-type: none"> 5% reduced steel plate 	\$100,000,000	\$95,000,000
TOTALS	\$115,000,000	\$103,800,000
TOTAL COST REDUCTION		\$11,200,000

3.4 TECHNOLOGY TRANSFER & IMPLEMENTATION (COMMITMENT TO IMPLEMENT AND WILLINGNESS TO SHARE)

NOTE: For projects selected by the NSRP Executive Control Board, a detailed Technology Transfer & Implementation Plan must be submitted and approved prior to execution of a Task Order Agreement (TOA). The [Technology Transfer & Implementation Guide](#) is available on the [NSRP website](#) to aid in



preparing this portion of the proposal, as well as developing the Technology Transfer & Implementation Plan.

Provide an overview of the project transition/implementation strategy and key stakeholders involved (Industry, Government, Academia). In so doing, the following information should be included:

- Description of the plan for industry dissemination of project developments, both during project execution and following implementation.
- Proposed presentations, demonstrations, pilots, project documentation, training, and prototypes, as well as any other technology transfer activities.
- 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.
- The impact any proprietary material/information will have on the ability to conduct effective technology transfer.
- Discussion regarding the potential use of training material. This element is needed within the participating shipyards, industry at large, and educational institutions.
- Previous and/or planned engagement with government or commercial stakeholders (e.g., Navy Program Executive Office, platform program manager, technical warrant holder (TWH), Supervisor of Shipbuilding) or other stakeholders to ensure buy-in and facilitate transition of project results to industry; and methods by which stakeholder commitment levels will be assessed during project execution. Include a statement describing any Navy TWH action required (e.g., specification or standards updates) to facilitate project implementation. If there is no Navy or government stakeholder involvement, provide an explanation as to why not. **[Contact information for some Navy stakeholders can be requested from NSRP.]**
- Specific plans for implementation within the proposing shipyards, including evidence of senior management support.

Proposers are required in this section to include an identification of specific factors that pose a risk to successful implementation of project results. Please see Appendix F for more detailed instructions.

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 during initial screening.

3.5 ATTACHMENT 1 – SUPPORTING TABLES

Attachment 1 will contain the tables discussed in the following sub-sections. Attachment 1 is not included in the page-count limitation.

3.5.1 PARTICIPANTS

Provide as [Table 1 in Attachment 1](#) a summary table that identifies each intended project participant, their role and key contributions to the project. (See Appendix A) **Formal letters of**



commitment will not be required with the Summary Proposal, but will be required at the time of the Blue Ribbon Panel, for those proposals that survive the down-select process to that point.

NSRP strongly encourages diverse project team composition, which include multiple shipyards, small businesses, academia and government.

For projects with fewer than two (2) shipyard participants, provide an explanation for why only one yard is involved in the effort. Also include a short description of how the proposed team will ensure the project results are applicable to the broadest possible subset of the shipbuilding and ship repair industry.

3.5.2 SUMMARY WORK STATEMENT AND FUNDING PLAN

Provide as [Table 2 in Attachment 1](#) a concise summary of the project schedule, and cost information. (See Appendix A)

3.5.3 KEY DELIVERABLES

Provide as [Table 3 in Attachment 1](#) a summary table that indicates the key deliverables. (See Appendix A)

3.5.4 TOTAL MAN-HOUR SUMMARY

Provide as [Table 4 in Attachment 1](#) a summary table of the **total** estimated man-hours (**NSRP-funded and cost-shared, combined**), broken down by project participant and major task. (See Appendix A)

3.5.5 TOTAL MATERIAL/EQUIPMENT SUMMARY

Provide as [Table 5 in Attachment 1](#) a complete list of material/equipment (**NSRP-funded and cost-shared, combined**) to be purchased in support of the project. This list should include items to be proposed by Team Members, Subcontractors, and Consultants. Include a description of each item of material or equipment, the quantity, the price per item, how the cost was derived (engineering estimate, past purchase, vendor quote, etc.), and how it will be used to support the project. The information in Table 5, to include the proposed material and equipment items and the total proposed cost, must be consistent with information on material and equipment in the Cost Summary. (See Appendix A)

All proposed property will be reviewed as part of the Source Selection process.

3.5.6 RISK MANAGEMENT

Provide as [Table 6 in Attachment 1](#) a matrix that identifies, by risk area, specific technical risks that might be anticipated, and the intended steps for avoiding or mitigating those risks. (See Appendix A)



3.5.7 METRICS

Provide as [Table 7 in Attachment 1](#) the performance improvement metrics that will be developed for the project. (See Appendix A)

3.5.8 COST SUMMARY

The objective of the Cost Summary is to provide sufficient evidence with which reviewers can make an initial determination that the proposed cost is realistic, relative to the proposed work.

IMPORTANT: For projects that are ultimately selected by the NSRP Executive Control Board, a full cost proposal must be submitted, fully analyzed by ATI Contracts staff, and found to be acceptable prior to execution of a Base Task Order Agreement. The Final Cost Proposal should not exceed the initial Cost Summary by more than 10%; if it does exceed the Summary by more than 10%, the proposal will be referred back to the ECB for disposition, which could include de-selection. Full details on the required [Final Cost Proposal](#) content and format are available on the NSRP website.

Provide as [Table 8 in Attachment 1](#) a table summarizing the following (See Appendix A):

3.5.8.1 PROGRAM FUNDING

A listing of proposed program-provided funding amounts, broken down by cost element (e.g., labor, travel, materials, team members). Any indirect costs/burdens associated with the proposed cost elements must be included in with the costs estimate.

3.5.8.2 COST SHARE

A listing of proposed cost share amounts, broken down by contributing organization and indicating the associated cost share categories. Cost share categories are as follows:

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. Overhead (excluding labor-related fringe benefits)
6. General & administrative (G&A) services
7. Manufacturing and production engineering (M&PE)
8. Implementation costs within the period of the project



9. Use of equipment, including software.

NOTE: Amounts of cost share proposed for the provision of software/software licenses should reflect the overall period of time during the project in which the software will actually be required, as well as the number of licenses required to complete all relevant tasks.

10. Intellectual property (market value)

11. Space (land or buildings)

For projects proposed with less than 50% cost share, provide a detailed rationale for why the goal could not be achieved and/or why that is appropriate based on factors such as project team composition, technology risk, implementation mechanism, etc.

Note: The Final Cost Proposal will require a breakdown of cost share based on its origin: Federal or Non-Federal. Details on providing this breakdown will be published in separate guidance.

3.5.8.3 PUBLIC SECTOR/PARTICIPANT PROVIDED FUNDING

A listing of funding amounts provided to the project effort by Federal public sector participants (e.g., Naval shipyards, Naval Surface Warfare Center elements, Regional Maintenance Centers, government labs, etc.) whose contributions cannot be counted as cost share, broken down by contributing organization.

3.5.9 FINANCIAL VIABILITY

This section may provide the proposer's current Dun and Bradstreet financial report (in accordance with all applicable copyright requirements). Alternatively, the required 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) can be provided as [Table 9 in Attachment 1](#). (See Appendix A)

The Executive Control Board expects proposers to minimize, to the greatest extent possible, project administration and support costs without sacrificing technical quality. A good example of this is the use of virtual meeting software in lieu of a face-to-face meeting, to reduce team travel costs. While it is recognized that the nature of a collaboration will require some direct contact to be effective, during the course of a project there will clearly be opportunities to have dialogue that will be productive without requiring that it be done in a face-to-face setting.



Appendices



APPENDIX A – SUMMARY PROPOSAL SUPPORTING TABLES

All the tables described in this appendix are mandatory, and shall be submitted as Attachment 1 to the Summary Proposal

Table 1 Participants

Project Participant	Role and Key Contribution
Shipyards AAA	
Company BBB	
Organization CCC	
Other	

Include justification for having less than 2 shipyard participants on the project team (if applicable).

Table 2 Summary Work Statement and Funding Plan

Phase Number	1	2	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.



National Shipbuilding Research Program

Proposal Preparation Kit

Table 3 Key Deliverables *EXAMPLE*****

Key Deliverables (Major Payable Milestones)	<ul style="list-style-type: none"> • Nationwide survey and analysis of shipyard injury and illness trends • An analysis of risk factors that contribute to leading causes of shipyard accidents, injuries and illness
Criteria for “Go/No-Go” Decision on Subsequent Phase	<ul style="list-style-type: none"> • Survey successfully completed • Analysis documented and submitted • Review of analysis indicates high quality

Table 4 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					



National Shipbuilding Research Program

Proposal Preparation Kit

Table 5 Total Material/Equipment Summary (NSRP-Funded and Cost-Shared)

Material/Equipment Description	Quantity	Price per Unit	How Cost was Derived	How Material/Equipment Will Be Used to Support Project

NOTE: Any items purchased or created over \$50,000 are subject to approval by the Government prior to award.



Table 6 Risk Management ***EXAMPLE***

Risk Area	Risk	Avoidance/Mitigation
Technical	R&D effort does not succeed in meeting project goals	Careful review of technical approach by all project team members prior to proposal submission Engagement with Navy stakeholder(s) to gain concurrence in problem identification and technical approach
Schedule	Scope exceeds schedule constraints	Inclusion of measurable milestones and deliverables Careful tracking of progress by project management
Cost	Scope grows, exceeds allotted funding	Rigorous financial tracking of project team members/subcontractors on all project tasks Consider additional cost share to accommodate necessary or high-value scope growth



National Shipbuilding Research Program

Proposal Preparation Kit

Table 7 Metrics/Benefit Realization *EXAMPLE*****

Metric	“As-Is” Baseline	Project Goal	Delta	% Change (+/-)	Tracking & Reporting Plan
Ship repair cycle time	120 days	85 days	35 days	-29%	Select a similar ship availability as baseline; document cycle time at the end of the job
Transaction cost for _____	\$700	\$125	\$575	-82%	Report quarterly as process improvements are implemented
Parts in inventory	20,000	12,000	8,000	-40%	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



National Shipbuilding Research Program

Proposal Preparation Kit

Table 8 Cost Summary

Program Funds		
Funding Category	Description	Amount (\$)
Proposer Labor		
Proposer Travel		
Team Members <i>(contributing cost share)</i>		
Subcontractors/ Consultants <i>(not contributing cost share)</i>		
Material/Equipment		
Other Direct Costs		
	TOTAL PROGRAM FUNDS	
Cost Share		
Category	Contributing Organization	Amount (\$)
	TOTAL COST SHARE	
Public-Sector Participant Provided Funding		
Category	Contributing Organization	Amount (\$)
	TOTAL PUBLIC-SECTOR PARTICIPANT PROVIDED FUNDING	
	TOTAL PROJECT COST	
	TOTAL PROJECT COST, MINUS PUBLIC SECTOR FUNDING	

Include rationale for proposing less than 50% cost share (if applicable).

NOTE: DO NOT INCLUDE LABOR HOURS IN THIS PORTION – ONLY FUNDING AMOUNTS.



National Shipbuilding Research Program

Proposal Preparation Kit

Table 8 Cost Summary (Program Funding Section) *EXAMPLE*****

Program Funds		
Funding Category	Description	Amount (\$)
Proposer Labor	Engineering Program Management Manufacturing	\$150,000
Proposer Travel	6 trips to team meetings, technology transfer events	\$10,000
Team Members <i>(contributing cost share)</i>	Shipyard A	\$100,000
	Shipyard B	\$50,000
	Shipyard C	\$50,000
	Software R Us, Inc. (type of license/license fee)	\$10,000
Subcontractors/ Consultants <i>(not contributing cost share)</i>	Technology Labs, Inc.	\$15,000
	University of Academia	\$10,000
	Lawyers R Us, LLC	\$10,000
Material/Equipment	Steel	\$5,000
Other Direct Costs	Meeting expenses	\$5,000
	TOTAL PROGRAM FUNDS	\$415,000

NOTE: DO NOT INCLUDE LABOR HOURS IN THIS PORTION – ONLY FUNDING AMOUNTS.



National Shipbuilding Research Program

Proposal Preparation Kit

Table 8 Cost Summary (Cost Share Section) *EXAMPLE*****

Cost Share		
Category	Contributing Organization	Amount (\$)
Labor	(Proposer)	\$150,000
Labor, Materials	Shipyard A	\$100,000
Labor	Shipyard B	\$50,000
Use of software	Software R Us, Inc. (type of license/license fee)	\$25,000
TOTAL COST SHARE		\$325,000
Public-Sector Participant Provided Funding		
Category	Contributing Organization	Amount (\$)
Labor	Naval Surface Warfare Center	\$13,000
TOTAL PUBLIC-SECTOR PARTICIPANT PROVIDED FUNDING		\$13,000
TOTAL PROJECT COST		\$753,000
TOTAL PROJECT COST, MINUS PUBLIC SECTOR FUNDING		\$740,000

NOTE: DO NOT INCLUDE LABOR HOURS IN THIS PORTION – ONLY FUNDING AMOUNTS.

NOTE: Ensure indirects/burdens are included in the respective estimates.



Table 9 Financial Viability

	Year T-3	Year T-2	Year T-1
Income Statement			
Revenue			
Annual Sales			
Cost of Sales (Cost of Goods Sold)			
R&D Expenditures			
Net Income Before Taxes			
Net Income			
Balance Sheet			
Total Assets			
Cash and Cash Equivalents			
Accounts Receivable			
Total Liabilities			
Accounts Payable			
Loans and Leases Payable			
Net Worth (Owner's Equity)			
Employment Information			
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.



APPENDIX B – RESEARCH ANNOUNCEMENT PROCESS OVERVIEW

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 proposers capable of satisfying the NSRP's needs. The RA method 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 proposers the flexibility to propose solutions to stated industry-wide problems.
- Proposers 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 a proposer's submission.
- The proposer defines the Statement of Work (SOW).
- The program point of contact may initiate communication with proposers.

Research Announcement Publication

The RA posted on [FedBizOpps](#) represents the official notification to prospective proposers 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 may 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), as well as on the [NSRP website](#). 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 RA posted on [FedBizOpps](#) will only be made by publishing an amendment to [FedBizOpps](#). 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 RA may be issued and the original one canceled if the requirements change substantially. Proposers 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 [FedBizOpps](#) as the original announcement.

Supplemental Information

Proposal Preparation Kit

The RA posted on [FedBizOpps](#) 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 proposer 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.

NSRP Website

Proposers are encouraged to browse the [NSRP website](#) to review general program information and additional solicitation details, including:

- [Strategic Investment Plan](#)
- [Technology Investment Plan](#)
- General [Solicitation](#) Information
- [Solicitation Resources](#)
- Sample [Base Task Order Agreement](#)
- [Project Portfolio](#)
- [Benchmarking Efforts](#)
- [Project Plan Templates](#)
- [Project Implementation](#)

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 date the RA is posted on [FedBizOpps](#) and the due date. The proposal due date can only be changed through a formal amendment of the [FedBizOpps](#) posting.

The published proposal due date is firm. Except under exceptional circumstances as approved by the NSRP Executive Director, requests for extensions will not normally be considered.

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 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.”

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.

Pre-Award Business Evaluation

Proposers should be aware that if the project is selected for award, the lead proposer shall conduct a pre-award Business Evaluation of all project team members, subcontractors, and consultants to include:

1. A determination that the Program Participant is qualified
2. A determination that the project funding is fair and reasonable
3. A determination regarding the value and reasonableness of the Program Participants’ cost sharing contribution
 - a. Criteria used in deciding whether to accept a recipient's cost sharing
 - b. How to value cost sharing related to real property or equipment
 - c. The depreciation status of real property or equipment and acceptability as cost share
 - d. Acceptability of costs of prior research as cost share



- e. Acceptability of intellectual property as cost share
- f. How to value a Program Participant's other contributions
4. A determination of Fixed-Support, Expenditure-Based, or Hybrid Approach
5. Method for Accounting, Payments, and Recovery of Funds

All documentation of the lead proposer's pre-award evaluations must be maintained and available for review upon request.

Contractual Vehicle

The contractual vehicle used to fund the awards will be a Task Order Agreement (TOA). Research conducted under the NSRP is intended to be partially funded by industry cost share, therefore the preferred Payment Method is Expenditure Based. Use of Fixed-Support is limited only to organizations whose accounting systems do not have the capability to collect and invoice based on actual costs incurred. If selected for award, organizations who request Fixed Support task orders will have to complete a Business System Information questionnaire that is subject to review and approval by the Program Administrator. *Note: The payment method identified in the proposal may not be the type approved for award.*

The most recent version of the base TOA can be found on the [NSRP website](#). Any modifications to the TOA 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 C – 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 recently-revised selection process (as shown in **Figure C-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.

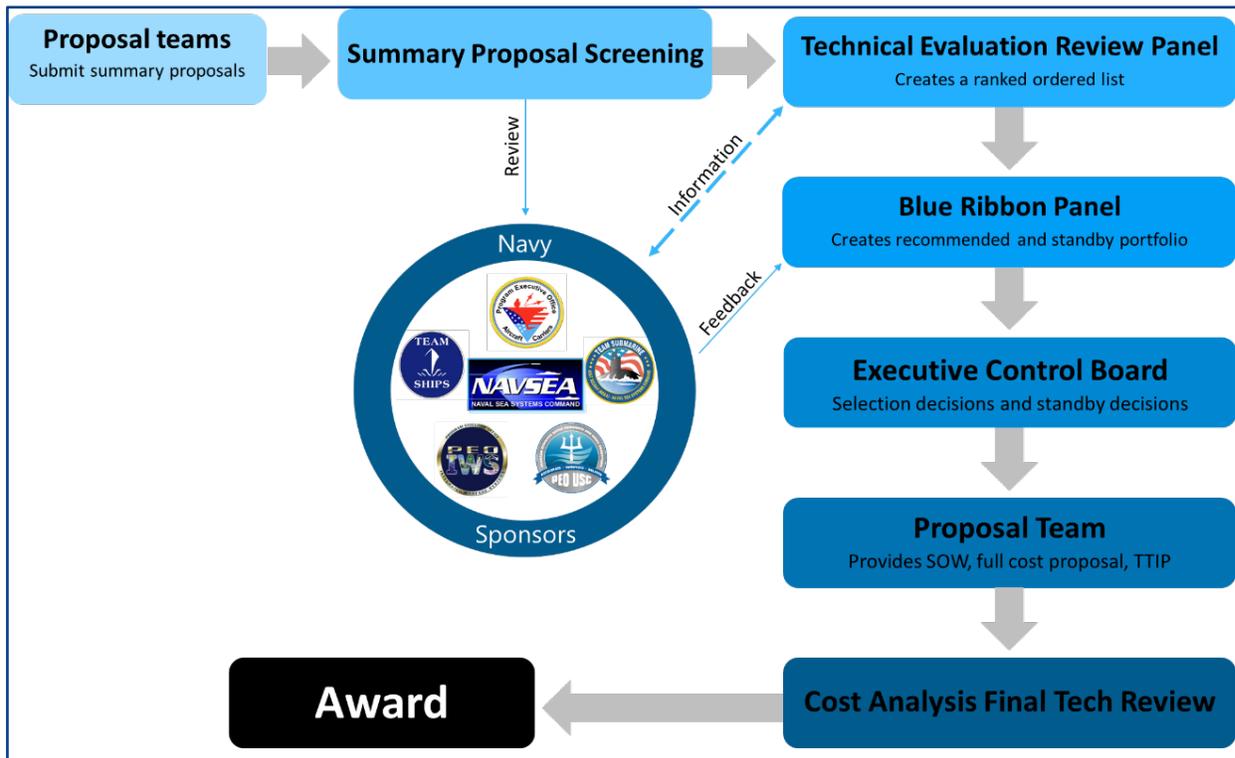


Figure C-1 NSRP ASE Proposal Selection Overview

Initial Screening

In the first step, called “initial screening”, Summary 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 content, does not comply with key format and content requirements, is significantly overpriced or underpriced given the scope of the work, or does not meet the requirements set out in the Research Announcement. The NSRP Proposal Checklist ([Appendix E](#)) is a key tool in ensuring compliance and successful initial screening.



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

- Summary Proposals without an affirmative response to the cover page certification of agreement to abide by the terms and conditions of the current [Task Order Agreement](#).
- Failure to include sufficient discussion on technology transfer and implementation plans.
- Non-inclusion of mandatory tables and information.
- Non-submission of ALL required summary cost information.

Technical 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 Summary 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 consideration by a Blue Ribbon Panel (BRP) composed of executive-level representatives with industry, government and/or academic experience. The TERP may also recommend questions to be asked of the proposers to elicit clarifying information for the BRP to consider.

Proposals judged to have the highest merit based on the technical review normally receive further consideration by the BRP. A 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. The Competitive Range may include all proposals down-selected by the TERP, or some subset thereof. 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, Strategic Investment Plan, and Technology Investment Plan.

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, government, and commercial customer base.

Consideration includes the balance between high and low risk strategies, technology maturity and potential competitive impact, available funding, and strategic fit with the industry/government/commercial 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 emphasizes 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 ATI offices in Summerville, South Carolina. Proposers may have up to four representatives present. The Oral Review focuses on technical and business questions. However, if the proposal involves less than two shipyards or less than 50% cost share, the representatives must be prepared to address the rationale for those conditions with the Blue Ribbon Panel. 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 Summary Proposal, 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. At the time of the Blue Ribbon Panel, proposers will be required to provide a letter of commitment from each key company or organization on the project team. 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. Letters of commitment must be signed by an individual who has signature authority to commit company resources.

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.

- Acceptable visual aids can include: a physical model, photographs, graphical depictions of concepts or project flows, short PowerPoint presentation, etc.
- Electronic presentations are limited to six (6) slides in Microsoft PowerPoint (1997 or later) format. Electronic presentations may include videos or animations, as long as the material is part of the presentation file (e.g., linking to the internet or requiring a separate program to display video is not allowed).
- If appropriate, 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 the 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. Ten copies of each handout should be provided.
- Up to four (4) different visual aids can be presented.
- Presenters are 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 Request for Proposal (RFP) will be issued within 2 business days after the selection meeting. A full cost proposal must be submitted to ATI for review and analysis by the NSRP Cost Analysis Panel within 30 days of receipt of the RFP. (Instructions for the cost proposal will be provided in a separate document.) A full Statement of Work and Technology Transfer &



National Shipbuilding Research Program

Proposal Preparation Kit

Implementation Plan must also be submitted within the same timeframe. Upon completion of the cost proposal evaluation, proposers will be issued and expected to execute the NSRP Task Order Agreement. It is anticipated that the cost proposal review and subsequent agreement execution should not take more than 30 days. Awardees will have 10 business days from the date of receipt of the TOA to execute the agreement. Failure to do so may result in cancellation of the project.



APPENDIX D – TECHNICAL EVALUATION FACTORS

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 C](#)), the Critical Technical Factors, and Discriminating Factors.

Critical Technical Factors

The TERP 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.

Strategic Fit and Leverage

Proposals will be evaluated for their fit with the NSRP ASE mission statement, the Strategic Investment Plan (SIP), Technology Investment Plan (TIP), 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 and ship repair 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 and TIP.
- 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 other 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 government, industry, and commercial stakeholders that extends significantly beyond the direct returns to the proposing organization(s). Considerations will include the breadth of applicability to the shipbuilding and ship repair 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. Anticipated participation by, or evidence of other prior engagement with Navy technical authorities or other government or commercial stakeholders, along with evidence of their support for the proposed work, helps bolster the business case markedly.

- 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.
- Consideration of projected implementation costs.

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, innovation, 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, 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 and ship repair technology and knowledge base.

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.

Discriminating Factors

Other key factors to be considered as discriminators include the following:

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-Specificity

As noted earlier, a project that has strong potential to generate substantial value to the government, industry, and commercial stakeholders 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, yet 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.



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.

Implementation Risk

An assessment of risks to the project being implemented.



APPENDIX E – NSRP SUMMARY PROPOSAL CHECKLIST

Proposers are encouraged to utilize this checklist to ensure that all items listed below are included or 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.*

No.	Item	Included in Submission?
1.	One electronic copy of a Summary Proposal	
2.	Summary Proposal page count does not exceed 10 (excluding Cover Page and Attachments)	
3.	Format requirements (font size, line spacing, margins, . . .) are in accordance with the published guidelines	
4.	Cover Page identifies Proposer and Team Members and Subcontractors	
5.	Proposer certifies on the Cover Page that, if selected for award, the proposer will provide a Full Cost Proposal in accordance with the NSRP Cost Guidelines Document dated June 14, 2018 and by the terms and conditions of the NSRP ASE Base Task Order Agreement dated April 27, 2018.	
6.	Proposer provides permission to use a technical summary of the proposal in preparing future SIP updates, TIP updates, and research announcements.	
7.	The following <i>Narrative Sections</i> are to be included in the Summary Proposal:	
	a) Synopsis	
	b) Problem To Be Addressed/General Objectives	
	c) Technical Approach	
	d) Current State and Relevant Efforts	
	e) People and Organizational Impacts	
	f) Technology Readiness Level (if applicable)	
	g) Business Case with ROI Discussion	
	h) Technology Transfer and Implementation (including Implementation Risk factors)	
8.	The following <i>Tables</i> are to be included in Attachment 1 to the Summary Proposal:	



National Shipbuilding Research Program

Proposal Preparation Kit

	1. Participants (including rationale for a project team with less than 2 shipyards, if applicable)	
	2. Summary Work Statement and Funding Plan	
	3. Key Deliverables/Go-No Go Criteria	
	4. Total Man-hour Summary (NSRP-funded and Cost-Shared)	
	5. Total Material/Equipment Summary (NSRP-funded and Cost-Shared)	
	6. Risk Management	
	7. Metrics/Benefit Realization	
	8. Cost Summary (including rationale for proposing less than 50% cost share, if applicable)	
	9. Financial Viability or Dun & Bradstreet Report	
9.	Project duration is within RA guidance	



APPENDIX F – IMPLEMENTATION RISK

Using the below project categories and definitions, identify the category that is most applicable to the proposed process or technology. Once the project category is selected, identify and briefly discuss any applicable implementation risk factors. No assessment of severity is expected or required. However, failure to adequately address appropriate implementation risks to the proposed project will be addressed as a discriminating factor during the TERP evaluation process.

Project Categories**1. Process Change - Under Cognizance of Industry (Only Company-Internal Resources Required)**

A production or repair process change that does not impact the fit, form, or function of a platform component and does not require formal government and/or regulatory body approval. Production Processing Change, Production Material Change and Above-the-Shop Floor Production Engineering/Planning Improvement are all examples that fall under this project category. The process should require only technical equivalency, technical maturity, and a strong business case to meet implementation requirements. There might be some equipment or implementation funding necessary (less than \$50K). Only company-internal resources are required for implementation.

2. Process Change - Program Office/Technical Warrant Holder Approval Required

A production or repair process change that impacts the fit, form, or function of a platform component. A Production Processing Change and Production Material Change associated with a Navy-controlled specification can fall under this project category. An example project is a new welding process that requires formal written approval by the Navy PO/TWH for implementation.

3. Process Change – Outside Resources/Funding Required (Equipment/Implementation)

A production or repair process change that does not impact the fit, form, or function of a shipboard configuration item and does not require formal government and/or regulatory body approval. However, the solution requires capital investment and/or implementation funding by the implementing organization. Production Processing Change, Production Material Change and Above-the-Shop Floor Production Engineering/Planning Improvement are types of projects that fall under this project category. Capital investment and/or implementation funding should be over \$50K to be considered in this category.

4. Process Change – Program Office/Technical Warrant Holder Approval Required; Outside Resources/Funding Required (Equipment/Implementation)

A production or repair process change that impacts the fit, form, or function of a shipboard configuration item but also requires capital investment by the implementing site. The new process requires formal written approval by the PO/TWH for implementation. Production Processing Change and Production Material Change associated with a Navy-controlled specification are types of projects that fall under this project category. This capital investment decision adds to the difficulty of implementation path and adds uncertainty to future implementation.

5. Design Change – Program Office/Technical Warrant Holder Approval Required; Minor Implementation Resources Required

A change to a platform configuration item or structure that has significant collateral impact. Such a change will require significant documented approvals by the Program Office and (sometimes multiple) TWHs and



can have impact on logistical systems. Resources to acquire approval and implement change are minor, and risk to acquire resources is low.

6. Design Change – Program Office/Technical Warrant Holder Approval Required; Certification/Testing/Trials Required Before Approval

A change to a platform configuration item or structure that has significant collateral impact. This type of change is characterized by a requirement for documented approvals by the PO and (sometimes multiple) TWHs after the successful completion of the certification program that could include FEM modeling and simulation to verify performance, or large-scale testing, materials testing, and full-scale trials, for example. These types of projects are very difficult to transition due to the need for large amount of outside funding required to complete all certification testing.

Risk Factors

1. **Technical Risk** - This factor measures the risk of achieving the stated technical objectives of the project. Adequate funding, available resources, and technical expertise assigned to the project contribute to success for this factor. Risks are mitigated by having all project participants and stakeholders agree to these objectives prior to project execution. Further risk mitigation occurs when these agreed upon objectives are clearly stated and both interim and final technical objectives are met on or ahead of schedule.
2. **Design Change Required** - A design change is normally difficult to have approved unless the baseline process is inadequate. Implementing a design change may require several levels of approvals and an extensive amount of resources and time. This risk factor covers the implementation complications resulting from design dependency inherent in this type of project.
3. **Navy Program Office/Technical Warrant Holder Approval** - A project requiring future PO and/or TWH approval adds more complexity to the implementation process. This risk factor includes the criticality of the proposed solution, the amount of resources and time needed to secure the approvals, and the current measure of support from these organizations.
4. **Certification Required** - When implementing a change to a platform system, the component or material will be subjected to an analysis to determine that the change can meet all platform requirements. This can result in materials testing and evaluation, component prototype fabrication and performance testing, platform trials, etc. In such cases, the time and resources may be extensive. This risk factor includes the time, resources, and uncertainty resulting from the need to certify the product or process.
5. **Capital Equipment Funding Required** - It is inherently risky when implementation is dependent on an implementation site's capital investment. The severity of this risk depends on the amount, timing and business case status for this investment.
6. **Outside Implementation Funding Required** - Funding required to implement the proposed solution into production. It does not include capital equipment, but includes nonrecurring engineering costs, certification or verification testing programs, prototype construction, training, and start-up production costs.
7. **Insertion Schedule** - Benefits are maximized when applied to a first of a class or early in the class construction. If a project's benefits are significantly impacted by applying a solution to a specific implementation target, then the insertion schedule is important. Once a target implementation is identified, then the ability of the solution to meet that target must be evaluated. This risk factor tracks the project's ability to meet the target implementation on the specific build of the target platform or weapon system with certainty.



National Shipbuilding Research Program

Proposal Preparation Kit

8. Technology/Product Maturity – An NSRP project may result in a new process or product technology that must be implemented into production. These solutions may involve immature manufacturing processes or technology that has not been utilized extensively in the manner planned for by the project.
9. Commercialization Partner Required - New tools or processes may require components that have not been made before in commercial industry. This risk factor addresses the plan to commercialize the product or process. Important considerations in this factor include whether a commercial source has been developed and is capable of meeting the demands that may be required of it once the solution is fully implemented.



APPENDIX G – PROPOSAL SUBMISSION PROCESS

For this solicitation, the acceptable proposal submission method is upload via Secure File Transfer Protocol (FTP) site as described below:

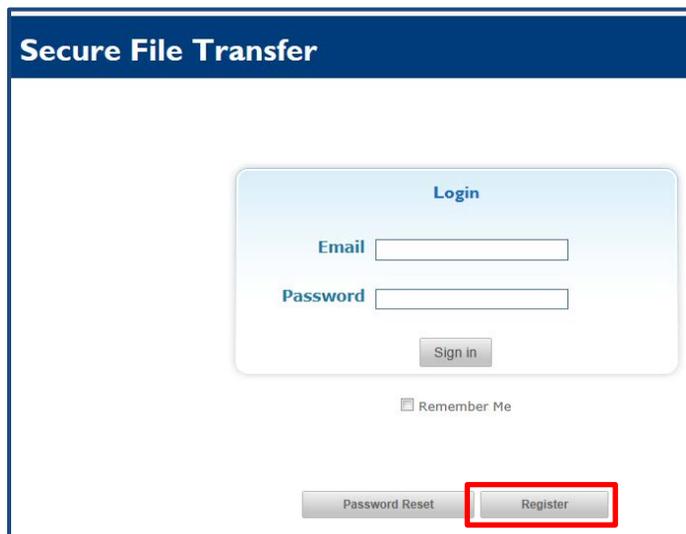
1) *Secure File Transfer Protocol (FTP) site*

For this solicitation, ATI will be employing the [ATI FTP Site](#) for submitting proposals, which was created to quickly and safely transfer files (particularly large documents) from an individual’s computer via the ATI secure server.

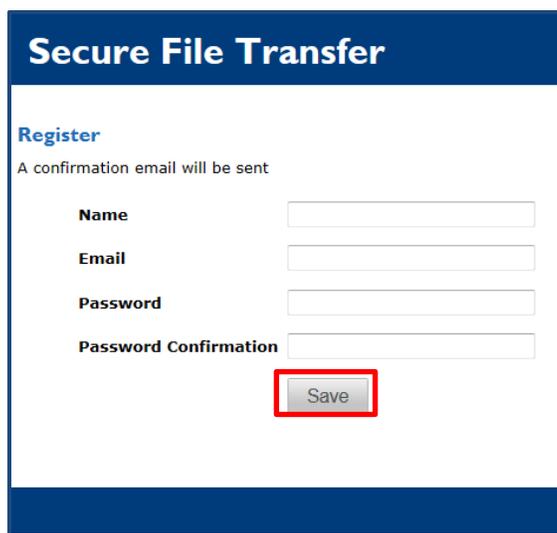
NOTE: Proposers will need to register on the ATI FTP Site prior to uploading proposals

Registering:

- 1) Go to the ATI FTP Site: <https://filetransfer.ati.org/>
- 2) Click on “Register” Button



- 3) This will open a new window:

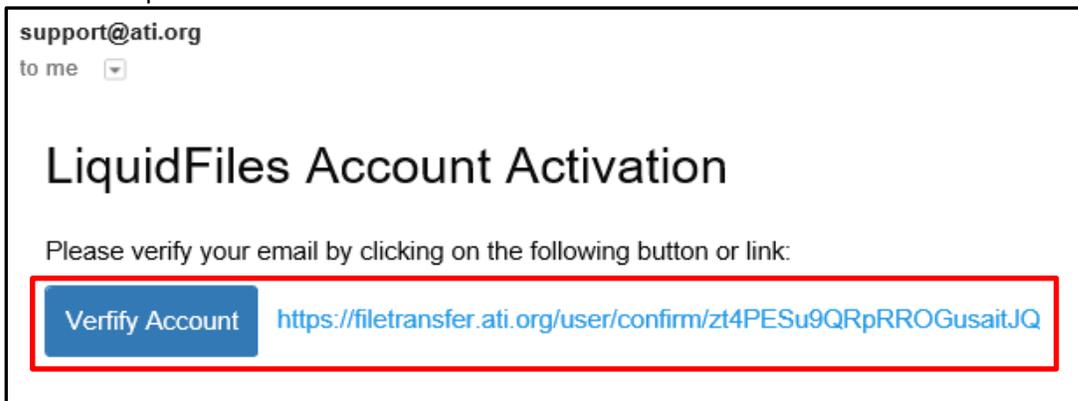


- 4) Complete fields above

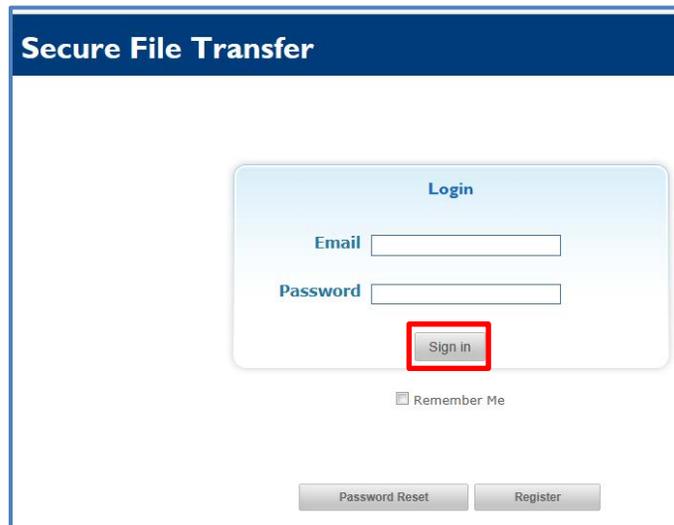
(NOTE: it is recommended that proposers use their primary/work email address, to facilitate retrieval of relevant information. Also the site will prompt users to choose a strong password for increased security)

- 5) Hit "Save"

- 6) An email will be sent to the email address entered when registering, which will include a unique link to activate the account:



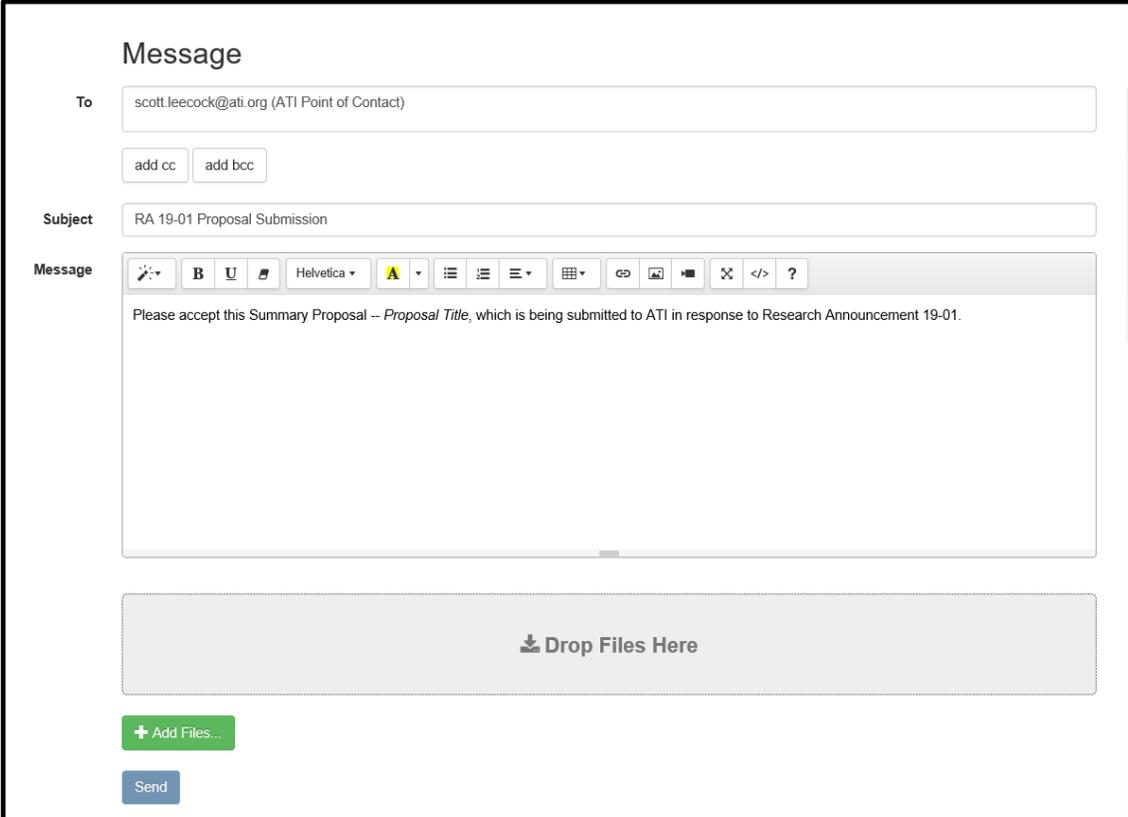
- 7) Unique link will take you back to the Login Page to confirm email and password:



- 8) Enter email and password used to register. Then hit "Sign In"

- 9) Submitting Proposals

- a. After signing onto the FTP Site, a message window will open:



The screenshot shows a web-based message composition interface. At the top, the title "Message" is displayed. Below it, the "To" field contains the email address "scott.leacock@ati.org (ATI Point of Contact)". There are "add cc" and "add bcc" buttons next to the "To" field. The "Subject" field contains "RA 19-01 Proposal Submission". Below the subject field is a rich text editor toolbar with icons for bold, italic, underline, text color, background color, bulleted list, numbered list, link, unlink, insert image, insert video, insert table, source code, and help. The main text area contains the message: "Please accept this Summary Proposal -- *Proposal Title*, which is being submitted to ATI in response to Research Announcement 19-01." Below the text area is a large grey box with a dashed border and the text "Drop Files Here". At the bottom left, there is a green button labeled "+ Add Files..." and a blue button labeled "Send".

- b. After completing the message as illustrated above, proposer will hit "Send" Button.
- c. Proposal will then be uploaded to the FTP site. A confirmation email will be sent to proposer that file has been successfully uploaded.
- d. After ATI Point of Contact downloads proposal, proposer will be notified via email that proposal has been downloaded.