

Concept Paper Template & Guide

This template is designed to help proposers prepare their concept papers for submission. The template outlines the essential components required in your concept paper, including executive summary, planned achievements, utility and benefit to NSTC Members, and estimated budget. The cover page, glossary, and references are not included in page count.

Your concept paper should clearly demonstrate the innovation and scientific merit of your proposed work while highlighting its potential benefits to NSTC membership.

Within 14 days of submission, you will receive feedback encouraging or discouraging submission of a full proposal, though all proposers who submit concept papers may proceed to full proposal submission regardless of feedback.

Proposers should note in the concept paper whether partnerships already exist with semiconductor manufacturing facilities. Please note that while partnerships with semiconductor manufacturing facilities are not required, they are highly encouraged. The template also includes formatting requirements to ensure your submission meets all necessary guidelines. We recommend reviewing all sections carefully before preparing your submission.

Formatting Requirements

- **Naming Convention:** Proposers are to include their OpenWater Application # in the title of their Submission.
- **Page Limit:** 3 pages or less. Submit separate concept papers for each **Focus Area**.
- **Font:**
 - Arial, Times New Roman, or Calibri (12pt+)
 - Aptos or Computer Modern fonts (11pt+)
 - Tables and figures: 10pt
- **Line Spacing:** Single
- **Margins:** One (1) inch on all sides
- **Page Layout:** Portrait orientation
- **File Format:** Typed, in English, in .docx or .pdf format

Cover Page [Not included in Page Count]

[Insert Company Logo]

Opportunity Name	
Opportunity Number	
Focus Area	
<i>Task Area (if applicable)</i>	[Not applicable for SMAP]
Reference Number	
Name of Proposer	
Technical POC / Principal Investigator	Name Title address / phone number / e-mail address
Subcontractors and/or subawardees (if applicable)	
Proposal Title	
Administrative POC	Name Title address / phone number / e-mail address
Total Funds Requested	
Total Cost Share	
Fundamental Research	Yes / No
International Collaborations	Yes / No
Existing Partnerships	Proposers should note whether partnerships already exist with semiconductor manufacturing facilities. Yes / No *(If Yes, please list partnerships)

Disclosure Statement: This document contains...

[Any statement regarding confidentiality, including proprietary or sensitive business information, if applicable]

A. Concept Paper Template

Executive Summary

*[Provide a concise summary of your technical approach and methodology. Highlight innovative aspects and how they address the specific **Focus Area** challenges.]*

Overall Scientific and Technical Merit

[Demonstrate knowledge of the current state of the art in relevant fields and the feasibility of the proposed technologies, including gaps, constraints, and significant challenges that must be addressed. Proposers may highlight preliminary work and supporting data. Clearly articulate specific, measurable goals and expected achievements. Describe how these represent significant advances relative to the state of the art globally. Explain how your proposed metrology and technology could lead to a fundamental advancement in science, knowledge, and understanding.]

Utility and Benefit to NSTC Membership

[Address the potential utility and benefits to NSTC membership, including accessibility of your technology to potential users and plans for making the NSTC membership aware of emerging knowledge. List information about proposed IP terms that will make rights in data, inventions, and copyrightable material available to the NSTC membership, and explain how these terms maximize the potential for commercialization.]

Estimated Budget

[Provide a high-level estimated budget breakdown per phase]

Glossary / References (not included in page count)

[Include glossary of terms and references of key publications, whitepapers, or technical documents from the team that demonstrate expertise in the relevant area. Limit the number of references to 1 page maximum.]
