

Attachment 1
Statement of Need
DIBC-RFS-26-03

Amendment 01 – Released July 20, 2026:

- Updates Need Statement and Government Goals and Objectives
- Changes are indicated in red text.

1.0 BACKGROUND AND AUTHORITY

The Defense Industrial Base Consortium (DIBC) is seeking prototype solutions to address critical supply chain vulnerabilities and manufacturing capability gaps within the domestic industrial base. The project outlined in this Statement of Need (SoN) is a subject of **Congressional Interest** and will be funded using **Research, Development, Test, and Evaluation (RDT&E)** appropriations.

All proposed solutions must align with the statutory objectives of the **Warfighting Investments, Resourcing, and Execution (WIRE) office and the Industrial Base Fund**. The primary goal is to sustain and enhance vital DIB capabilities, mitigate supply chain risks, and scale domestic production capacity to meet Department of Defense (DOW) operational needs. To meet the strategic requirement for expanding geographically distinct heavy industrial infrastructure, the Government seeks proposals that drive direct economic participation and localized industrial impact.

2.0 GENERAL REQUIREMENTS & GOVERNMENT EQUITY

Because this prototype project is funded via RDT&E to address critical national security shortfalls, **the Government expects to obtain equity commensurate with its investment.**

"Government equity" may include, but is not limited to:

- **Data Rights:** Government Purpose Rights (GPR) to technical data, manufacturing schematics, and software developed under this agreement.
- **Capacity Reservation:** Priority access or reserved production throughput at the upgraded or newly established manufacturing facilities.
- **Hardware Deliverables:** Delivery of functional prototypes, tooling, or initial low-rate initial production (LRIP) units.
- **Intellectual Property:** Shared licensing or royalty-free use of novel manufacturing processes developed with Government funds.

3.0 TECHNICAL TOPIC DESCRIPTION

Topic: Industrial Forge Quenching Capacity Improvement - (CF-26-03-001)

Heavy forging is a foundational requirement for major defense platforms, particularly within the Submarine Industrial Base (SIB), shipbuilding, and heavy armor.

Need Statement: Increase domestic infrastructure and capacity to improve throughput, reduce bottlenecks, and reduce lead times.

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Purpose: The Government intends to award a prototype project to design, upgrade, and validate improved industrial forge quenching capacity.

- **Government Goals and Objectives:**
 - Improve and increase industrial forge quenching capacity with particular emphasis on drop-bottom furnace and quenching of aluminum
 - Demonstrate implementation of advanced quenching infrastructure (eg, large-scale water or polymer quench tanks),
 - Feature automated, sensor-driven fluid velocity monitoring,
 - High-volume agitation control,
 - In-situ Heat Transfer Coefficient (HTC) tracking to guarantee metallurgical consistency, prevent stress fractures, and significantly increase throughput for the Department of War.

Congress has provided initial funding for this project, and the Government has **\$2,682,215** in RDT&E funds available. The Government understands this amount may not fully achieve the Government's goals and objectives. If the value of the proposed solution to fully achieve the Government's goals and objectives exceeds available funding, the Government requests Members submit a solution that includes a severable milestone at the funding availability mark. A severable milestone is considered as a milestone that is not dependent on a future milestone for the Government to receive value. For portions above available funding the Government requests Members to provide a summary of logical/planned next steps, including estimated schedule(s) and rough order of magnitude (ROM) costs to fully address the stated goals and objectives. This should be provided as potential phase(s) lasting between 12 to 36 months. This will help the Government identify and understand the Members projected solution and provide a potential starting point for cooperative (Government and Awardee) development of additional phases as necessary.

- The Government intends to make a **single award** fully utilizing available funds.
- **Teaming arrangements are acceptable** and encouraged to meet complex supply chain requirements.