



**Code 40 Launcher Systems and
Payload Integration Division
Surface Vessel Torpedo Tube (SVTT) MK 32
In-Service Engineering Support Services
Pre-Solicitation Conference**

**NUWC Division Newport
Undersea Collaboration & Technology
Outreach Center (UCTOC)
March 9, 2017**

Agenda

- **Introduction/Ground Rules**
- **Disclaimer Statement**
- **Anticipated Procurement Strategy**
- **Technical Requirements**
- **Conclusion/Wrap-up**
- **DIVNPT Competition and Small Business Overview**

Introduction/Ground rules

- **Introduction of Participants**
- **Intent of this Pre-Solicitation Conference**
 - **Encourage competition by:**
 - **Providing technical information to provide potential offerors a better understanding of the technical requirements**
 - **For Prime and Subcontracting opportunities**
 - **Ensure all potential offerors receive, and have access to, the same information**
- **Technical “Q&A” is encouraged**
 - **Q&A will be answered, either today or via SeaPort-e Portal**
 - **Q&A/Feedback Forms**
 - **No questions about incumbent contractor**

Introduction/Ground rules (cont.)

- All attendees recommended to sign-in (this is voluntary)
- Please silence cell phones and pagers. No personal recording
- Q&A will be recorded, typed, and posted to the SeaPort-e Portal
- The Attendees list will be posted to the SeaPort-e Portal
- This briefing will be posted to the SeaPort-e Portal and the NUWCDIVNPT Electronic Reading Room:
 - <http://www.navsea.navy.mil/Home/Warfare-Centers/NUWC-Newport/Partnerships/Business-Partnerships/Electronic-Reading-Room>

Introduction/Ground rules (cont.)

- **DO NOT directly contact the NUWC technical code after today - all further dialogue will be accomplished via the Q&A feature on the SeaPort-e Portal**
- **Technical requirements contained in this briefing are presented as a summary**
 - **Full/updated technical requirements will be provided in the Request for Proposal (RFP)**

Disclaimer Statement

- **Remarks today by Government officials involved in the Code 40 Surface Vessel Torpedo Tube In-Service Engineering Support Services requirement should not be considered a guarantee of the Government's course of action in proceeding with the acquisition**
- **The informational briefing shared today reflects current Government intentions and is subject to change based on a variety of circumstances**

The formal solicitation, when issued, is the only document that should be relied upon in determining the Government's requirements

Anticipated Procurement Strategy

- **This is a follow-on of NUWCDIVNPT requirement N00178-04-D-4083, N459**
 - 1 Offer received
 - MRC (Incumbent)
- **SeaPort-e Task Order, Zone 1, Northeast**
 - Prime
 - Sub
- **Five (5) year Period of Performance**
 - Base year plus 4 one year options
 - Set-Aside for Small Business TBD
- **Contract LOE: 240,000 hrs. – CPFF/FFP**
- **Organizational Conflict of Interest (OCOI) Clause Applies**
- **Clearance Level: Secret**

Anticipated Procurement Strategy (con't)

- **Other Direct Costs (ODC's) will be approx. 35% of total cost**
- **Estimated Schedule:**
 - **RFP Release: Aug 2017**
 - **Proposals Due: 30 days after RFP release**
 - **Award Date: February 2018**

Anticipated Procurement Strategy (con't)

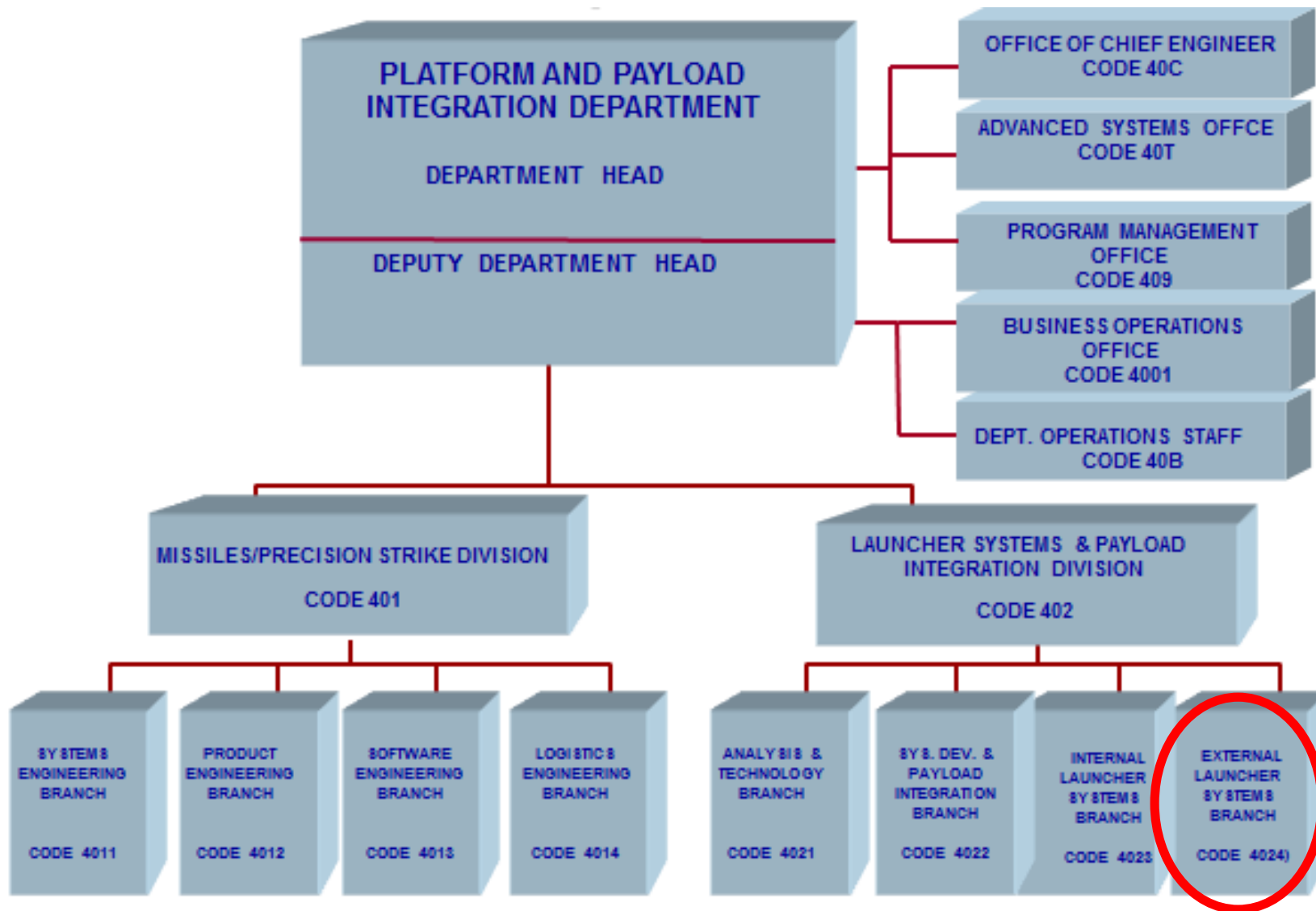
- **Work Locations**
 - **20% Government-site, 80% Contractor Site**
- **Facilities**
 - **Government will provide facilities for on-site personnel**
 - **Facility Security Clearance Required: Secret**
 - **Government Furnished Materials/Equipment/Information (GFM/E/I)**
 - **Provided in Solicitation and upon award of contract**
 - **Contractor Production Facility for Material Overhaul and Testing**
 - **Certified Crane Operators (CAT II) required**
 - **OSHA/HAZMAT Certification required**
 - **Minimum floor space to accommodate overhaul of 6 SVTT at a time**
 - **Each SVTT is 60 SQ FT assembled, approximately 500 SQ FT disassembled**
 - **Each SVTT weighs 2260 LBS assembled**



Technical Requirements & Overview



Platform and Payload Integration Department - Code 40





Platform & Payload Integration Department Overview

Our Mission:

Provide Full Spectrum Life Cycle Technical Leadership and Knowledge Base for Submarine Missile/Payload Integration, and Undersea Warfare (USW) Launcher Systems

Our Vision:

Remain relevant by sustaining our Technical Capabilities and upholding our reputation as the Navy's subject matter experts in the definition, development, and life cycle support of undersea warfare launcher systems, submarine tactical missiles, and submarine payload integration to ensure current and future US Navy technical superiority

The Code 40 Product Line

- **Submarine Launcher Systems**

- Torpedo Tubes
- Launchway/Shutter Doors
- Ejection Systems (Ram Pump, Turbine Pumps)
- Vertical Launch System (VLS)
- Weapon Handling / Stowage Systems
 - Torpedo Room
- Control Panels
- Internal/External Countermeasure Launchers
- Trash Disposal Unit
- Torpedo Mounted Dispenser (TMD)
- VA Payload Tube (VPT), VA Payload Module (VPM)

- **Submarine Launched Tomahawk Missile**

- All-Up-Round & Capsule
- Test Missiles (TOTEM) / Support Equipment
- TOMIS – Tomahawk Management Information System

- **Encapsulated Harpoon Weapon System (FMS)**

- All-Up-Round & Capsule
- Test Missiles / Support Equipment
- Encapsulated Harpoon Command & Launch Subsystem

- **Electronic Missile Simulators – MK 101 and MK 112**

- **Surface Ship Tubes (SVTT MK 32, TWS/CAT)**

- **Hatches, Trunks and Closures**

- **Hydrodynamic, Shock, and System Safety Analysis**

- **TEMPALT Development**

Code 40's Roles & Responsibilities

In-Service Engineering Agent (ISEA)
Technical Direction Agent (TDA)

Design Agent (DA)
System Integration Agent (SIA)

**Acquisition
Engineering Agent (AEA)**

Missiles/Precision Strike Division

(Code 401)

- ISEA for Submarine Launched Tomahawk All-Up-Round (AUR)
- ISEA/DA/AEA for Tomahawk Capsules and Peculiar Support Equipment
- ISEA for Submarine Launched Tomahawk All-Up-Round (AUR)
- TDA/ISEA/SIA/AEA/DA for Encapsulated Harpoon Weapon System
- TDA/ISEA/AEA/DA for Tomahawk Missile AUR Electronic Simulators

Launcher Systems & Payload Integration

(Code 402)

- TDA & ISEA for Tactical Weapon Launch & Handling Systems Including:
 - Horizontal Torpedo Tubes
 - Torpedo Tube Control Panels
 - Internal Countermeasure Launcher
 - Vertical Launch System
 - **Surface Vessel Torpedo Tubes**
 - Trash Disposal Unit
 - VIRGINIA Payload Tube
 - VIRGINIA Payload Module including AEA
- TDA & DA for Payload (non-missile) launch and recovery performance for VPM
- TDA for Submarine Structural Closures & Trunks
- TDA for External Countermeasure Launcher
- TDA, ISEA, SIA & AEA for FMS Submarine Launcher Systems



SURFACE VESSEL TORPEDO TUBES (SVTT)

- SVTT is Lightweight Torpedo (MK 46 and 54) launcher for surface combatant ships
- US Navy used on CGs and DDGs
- Widely used on FMS ships
- TDA/ISEA support for all mods of Surface Vessel Torpedo Tube (SVTT) MK 32 Launchers, Torpedo Loading Trays (TLT) and Ancillary Equipment
- Provide technical, engineering & program management support to the Fleet, Training Schools, RMCs, Shipyards, Naval Supply Support Agency, Defense Logistics Agency, PEO IWS5 and PMS 404



SURFACE VESSEL TORPEDO TUBES (SVTT)

- Develop engineering changes to existing systems based on Fleet reported issues; and/or payload or platform requirement changes
- Maintain the technical data package and technical documentation for the launcher
- Respond annually to PMS TFBRs; respond to DLA requests for engineering support; respond to TMDER requests
- Support SVTT Operation and Maintenance Navy Training Schools in Norfolk, San Diego and Pearl Harbor and the Gunner's Mate basic training school in Great Lakes, IL
- Provide production and overhaul of SVTT MK 32 Launchers for US Navy new construction DDGs and for FMS customers

**General Information for SVTT Technical Document
posted to SeaPort-e Portal**

SVTT In-Service Engineering Support Services Requirements

- **Primary Tasks**
 - **Task 4.1: Engineering Analysis, Design and Design Review (~70% of tasking)**
 - **Task 4.2: Integrated Logistics Support (~10%)**
 - **Task 4.3: Configuration Management (~5%)**
 - **Task 4.4: Engineering/Technical Documentation (~15%)**
- ❖ ***A list of Government Specifications and Standards as well as Government Furnished Information (GFI) is provided in the SOW***

SVTT In-Service Engineering Support Services Requirements

- **Task 4.1: Engineering Analysis, Design and Design Review Tasks**
 - **Engineering Analysis, Design Studies, Investigations and Reviews**
 - Engineering studies of proposed and existing systems, subsystems and components
 - Evaluate operational performance, identify and define problems with existing systems
 - Review and evaluate design changes and improvements to existing and proposed systems
 - Conduct analysis of shock, stress, structural and material properties
 - Design work utilizing SolidWorks software
 - **Manufacturing and Installation Studies**
 - Conduct studies to investigate producibility, fitment, and systems integration requirements

SVTT In-Service Engineering Support Services Requirements

- **Task 4.1: Engineering Analysis, Design and Design Review Tasks (con't)**
 - **Field Services**
 - Conduct system evaluation, grooming and troubleshooting of fielded systems.
 - Perform repairs, configuration validation and installation certification
 - **Prototype and Production Ordnance Alteration (ORDALT) Hardware**
 - Fabricate and assemble prototype and production ORDALT hardware.
 - **Development, Review and Update of Maintenance Procedures**
 - Develop new and review and update existing procedures for the Depot-, Intermediate- and Organizational-Level repair and overhaul of equipment

SVTT In-Service Engineering Support Services Requirements

- **Task 4.1: Engineering Analysis, Design and Design Review Tasks (con't)**
 - **Physical and Functional Interface Studies**
 - **Perform engineering studies on the physical and functional interface of the ship, launchers and devices launched**
 - **Provide recommendations for changes to existing requirements documents**
 - **Conduct installation and checkout of ORDALT hardware kits and installation instructions**
 - **Test Plan Development**
 - **Develop new or modify existing plans for functional and environmental testing of existing or proposed systems and subsystems**
 - **Conduct and monitor system tests**

SVTT In-Service Engineering Support Services Requirements

- **Task 4.1: Engineering Analysis, Design and Design Review Tasks (con't)**
 - **Launcher Overhaul and Production**
 - Conduct the overhaul and assembly of launchers for US Navy New Construction Ships and FMS customers
 - Procure, perform QA inspection and testing of subsystems or components
 - Assemble, test and conduct factory acceptance testing
 - Functional testing requires launch of torpedo shape
 - Requires contractor facility
 - Support the overhaul of 6 SVTT launchers at one time
 - ~ 3000 SQ FT needed for launcher tear down
 - Space needed for subassembly production and test
 - Functional testing
 - ~ 1500 SQ FT x 15 FT High space needed for launch testing
 - Requires CAT II crane operators



SVTT In-Service Engineering Support Services Requirements

- **Task 4.1: Engineering Analysis, Design and Design Review Tasks (con't)**
 - **Hazardous Material Management**
 - **Manage, coordinate, track and store all hazardous material used within the production and test facilities**
 - **Program Activity and Status Tracking and Reporting**
 - **Record, manage, coordinate and track program activities**
 - **Maintain program master schedule to track milestones and deliverables**

SVTT In-Service Engineering Support Services Requirements

- **Task 4.2: Integrated Logistics Support (ILS)**
 - **ILS Plan Preparation and Maintenance**
 - **Prepare new and update existing ILS Plans for new or modified launcher systems**
 - **Provide recommendation for spare and repair parts acquisition and provisioning requirements**
 - **Perform reliability and maintainability assessment studies using equipment failure reports**
 - **Review and prepare recommendations for changes to AELs and APLs**
 - **Planned Maintenance System (PMS) Documentation**
 - **Prepare, revise and maintain PMS documentation for new and existing launcher systems**

SVTT In-Service Engineering Support Services Requirements

- **Task 4.2: Integrated Logistics Support (ILS) (con't)**
 - **Fleet Inquiries**
 - Review, investigate and respond to Fleet COSAL feedback reports
 - **Pre-Expended Bin (PEB) and Work in Progress (WIP) Material Inventory Management**
 - All Material Management of Operation and Maintenance Supplies is managed under a base-wide NUWCDIVNPT contract
 - PEB is material needed to support a production or maintenance activity
 - WIP is OMS actively being refurbished or assembled into larger assemblies
 - In support of launcher overhaul and production, PEB and WIP material shall be received
 - Inventory database shall be maintained
 - Storage and issue of PEB and WIP material shall be conducted

SVTT In-Service Engineering Support Services Requirements

- **Task 4.3: Configuration Management**
 - **CMPro Database Management**
 - **Maintain CMPro database for SVTT Launcher Systems and subsystem data**
 - **Equipment configuration**
 - **New and revised technical documentation**
 - **Engineering Change Proposals (ECPs)**
 - **ORDALTs**
 - **Requests for Deviation/Variance**

SVTT In-Service Engineering Support Services Requirements

- **Task 4.4: Engineering/Technical Documentation**
 - **Technical and Engineering Documentation**
 - **Prepare, review and revise technical documentation**
 - **Technical Memorandums**
 - **Technical Documents**
 - **Technical Manuals and Illustrated Parts Breakdowns (IPBs)**
 - **Interactive Electronic Technical Manuals (IETMs)**
 - **Ordnance Alteration (ORDALT) Documentation**
 - **Prepare new and revise existing ORDALT Installation Manuals**
 - **Engineering Drawings**
 - **Prepare new and revise existing engineering drawings (currently CAD based using SolidWorks or AutoCAD)**
 - **Graphic Artwork and Presentation Material**
 - **Prepare graphic artwork and presentation material (viewgraphs, illustrations, charts, posters, videos) in support of technical and management briefings**

Conclusion/Wrap-up

- **Thank you for your interest in the Code 40 SVTT In-Service Engineering Support Services requirement**
- **The attendees list will be posted to the SeaPort-e Portal**
- **This briefing will be posted to the SeaPort-e Portal and the NUWCDIVNPT Electronic Reading Room**
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