

# **Guidehouse Value Proposition:** Team Submarine Enterprise-Wide Contractor Support Services





# Introduction

## Enterprise-Wide and Life-Cycle Management Support to NAVSEA Team Submarine

“Team Submarine” is an initiative with a very focused mission: “keeping America’s Navy #1 in the world by developing, acquiring, modernizing and maintaining the world’s best Submarines and Undersea Systems.” The program was created by the Assistant Secretary of the Navy for Research, Development and Acquisition (RDA), the Program Executive Officer (PEO) for Submarines and the leadership of the Naval Sea Systems Command (NAVSEA). One of its key aims is to set the “value-added standard for acquisition, engineering, business, and maintenance.”

As Team Submarine executes its mission and strives to meet this valued-added standard, it also supports the capability and readiness demands of new and emerging threats and greater operations tempo. Team Submarine must also face the ongoing fiscal challenges of balancing shrinking budgets with rising operation costs. Opportunities for design for affordability (DfA), innovative modernization, rapid technology insertion, streamlined acquisition, quality, financial and cost management, sustainable cost reduction, enterprise and supply chain risk reduction, operations performance improvement and cyber security have become critical to overall operational capability, capacity and deployment. These capabilities provide Team Submarine with the tools and data to support informed decision making—optimizing resource usage and ensuring the team achieves its mission.

With our combination of global and international defense, Department of Defense (DoD), federal and commercial knowledge and experience, Guidehouse LLP is uniquely qualified to support Team Submarine in many of these areas—with industry-leading, award-winning and value-added capabilities. This is a sample of those capabilities, as they align with the Enterprise-Wide Contractor Support Services requirements for Team Submarine.

### Acquisition Support

#### Design-for-Affordability (DfA)

Affordability continues to grow in importance in the current fiscal and operational environments and is expected to keep doing so for the foreseeable future. Costs to build, own and operate the Navy fleet are increasing faster than inflation — and budget constraints continue. All ships, programs or systems must be viewed and managed in the context of total ownership costs (TOCs) that address everything from research and development to acquisition, operation, logistics support and disposal. Considering that Operations and Support (O&S) costs account for 70-80 percent of a system’s entire cost, system support must be considered and addressed early in the design process. Design-for-Affordability (DfA) facilitates this process.

In September 2005, the Chief of Naval Operations (CNO) challenged the Navy acquisition community to reduce Virginia-class submarine construction cost by 20 percent as a condition to double production by FY 2012 to a two-per-year rate within a \$4 billion budget, known as “2 for 4 in 12.”

The aggressive amount of the cost reduction and the short timeframe required an innovative approach to cover all aspects of cost in a comprehensive—but rapid—manner. Guidehouse worked with the prime contractor and the Navy to create and implement a plan to fundamentally and permanently reduce costs for the Virginia, leveraging our Inherent, Structural, Systematic and Realized (ISSR) cost framework to attack all major costs. Guidehouse helped organize and orchestrate a cost-reduction effort involving hundreds of people in joint teams of prime contractor, supplier and Navy personnel.

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Cost-reduction targets were achieved, leading Congress to increase production by 100%—from one to two submarines per year. The Virginia program has become a positive example of Navy ship acquisition at a time when other DoD programs are experiencing major difficulties.

The Guidehouse approach to DfA addresses the entire product life-cycle, including: needs assessment, conceptual evaluation, preliminary design, detailed design, production, operations and disposal. The DfA cost-reduction philosophy holds true across all types of costs in a program's life-cycle. Depending on where a program is in the life-cycle, it can be development-focused, production-focused and/or operations-focused.

For each and/or all those phases, we apply a tailored Inherent, Structural, Systematic and Realized (ISSR) framework, which can scale for varying degrees of difficulty. On the strategic side, cost-reduction potential ranges between 10 and 50 percent, and on the tactical decision-making side, cost-reduction potential ranges between 5 and 40 percent. Our ISSR framework can be applied successfully on an ongoing basis across the Navy, NAVSEA and Team Submarine in support of the NAVSEA Strategic Business Plan, which emphasizes the "culture" of affordability.

### **Acquisition Management**

Acquisition management faces many challenges, from an ever-evolving, budget-constrained environment to the continued turnover of the acquisition workforce. The sound acquisition strategies and methodologies highlighted in the DoD's "Better Buying Power (BBP) 3.0" memorandum continue to "strengthen the culture of cost consciousness, professionalism and technical excellence," as the Navy and the rest of the DoD combat these and other challenges and seek to increase the productivity, efficiency and effectiveness of the Department's many acquisition, technology and logistics efforts and programs.

The major objectives of BBP 3.0 are to: (1) achieve affordable programs; (2) attain dominant capabilities while controlling life-cycle costs; (3) incentivize productivity in industry and government; (4) incentivize innovation in industry and government; (5) eliminate unproductive processes and bureaucracy; (6) promote effective competition; (7) improve the tradecraft in the acquisition of services; and (8) improve the professionalism of the total acquisition workforce. Underpinning the objectives of BBP 3.0 are best practices of industry and government—especially commercial best practices.

Guidehouse continues to apply our considerable commercial experience—especially with the aerospace and defense industries—to introduce, implement, support and foster acquisition best practices in DoD and other federal agencies. These best practices include: Design-for-Affordability (DfA), as mentioned above, as well as innovation strategy, innovation and development excellence, competitive manufacturing, acquisition/sourcing transformation, strategic sourcing, performance-based contracts, the shift to cost (vice budget) management, collaborative demand planning and requirements development, acquisition performance and process improvement, strategic relationship management, greater benchmarking and more effective use of market research.

Guidehouse has experience in all acquisition category (ACAT) levels from 1D to III, and in all phases of the life-cycle. For example, we developed one of the first Major Weapon System level, Post Implementation Review Plans and a Competitive Acquisition Strategy for a major weapon system, within new USD (AT&L) requirements.

Guidehouse also supported the OSD (AT&L) Performance Assessment and Root Cause Analysis (PARCA) Division in adapting a methodology that, upon execution, would enable senior DoD leaders to determine the effectiveness of acquisition policy changes on the defense acquisition system, along with issues that interfere with achieving efficiency and responsiveness in the acquisition of major defense acquisition programs (MDAPs). This methodology became the Independent, Integrated Program Review (I2PR), which is discussed in further detail on the following page.

## **Business Financial Management Support**

### **Business Financial Management, Cost Estimating and Cost Management**

As the Navy and the DoD reshape the naval military enterprise due to budget uncertainties, a continuing decline in resources, a historic realignment of interests and influences around the world and the changing threat and national security environments, they are also reforming the defense enterprise itself—especially its business environment—to better enable warfighter success. Doing so entails a greater focus on several key areas: financial and cost management; cost analysis and the cost of operations; the importance of performance improvement, reliability and agility; better informed decision making and accountability supported by robust business intelligence and relevant metrics.

To achieve these goals, it is vital to have visibility into the cost of operations, and to transition the Navy and the rest of the DoD to a more cost-conscious environment—an environment where managers at all levels understand the costs of operations and are thus able to make informed decisions on finding efficiencies. Cost management begins with a Cost Accounting Framework. Guidehouse's Cost Accounting Framework is based upon commercial and public sector leading practices that have been proven effective in large, complex organizations.

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We tailor the framework to each unique entity, starting with the strategic objectives of the organization (e.g., the DoD, the Navy, NAVSEA and Team Submarine), and then work collaboratively with the organization to define horizontal and vertical cost-focus areas. The process generates evidence for inclusion in a cost/benefit analysis; and, in turn, the cost/benefit analysis helps to inform our overall observations and recommendations. This approach builds a foundation—and generates tactics—for cost accounting and an improved cost culture.

Guidehouse has extensive knowledge and experience in Navy and Marine Corps business financial management, encompassing financial planning, programming, budgeting systems and execution of fiscal submissions to include the annual development of the Program Objective Memorandum (POM) process. We understand the Planning, Programming, Budgeting and Execution (PPBE) process, and can therefore effectively acquire, allocate, account for and analyze personnel and financial resources for PEO Submarines. Current Guidehouse staff have provided extensive PPBE support with Navy commands NAVSEA, ONR and NAVAIR. At NAVSEA, our staff have worked directly with the SEA 01 Comptroller office and SEA 02 Contracts office in support of various budget support offices. In these roles, Guidehouse staff have delivered PPBE support and resolved execution issues in order to achieve performance benchmarks while addressing sequestration and continuing resolution authority (CRA) impacts to FY financial planning.

As budget controls tighten, Guidehouse understands the important role cost estimates play in the acquisition management process. Guidehouse has worked with the Naval Center for Cost Analysis (NCCA) and SEA 05C, Cost Engineering and Industrial Analysis Division, and has in-depth knowledge of NAVSEA cost-estimating processes and procedures. We make use of historical databases such as Naval Visibility & Management of Operating and Support Costs (VAMOSOC) to conduct rigorous cost analysis and can articulate cost impacts to program managers in an easily understandable manner.

To better support NAVSEA, current Guidehouse staff have extensive knowledge of NAVSEA's current legacy budgeting systems which are interfaced to Navy-ERP (N-ERP). This includes PRISMS, as well as systems targeted for transition to Navy-ERP and current feeder systems such as WAWF, DAMIR, STARS HQ/FL, COBRA, PBIS and others. Given our understanding of NAVSEA's budgeting systems, we are able to provide PEO Submarines with the benefit of help with executing operations and business processes, resulting in clear, transparent, open and proactive financial reporting against approved budget line items and early identification of financial challenges to support financial management and leadership decision making.

Guidehouse would be able to provide PEO Submarines with the most effective mix of financial support to ensure that appropriation is carried out with its proper funding policy in achieving performance benchmarks. Guidehouse would be able to meet POM requirements for the Navy/Marine Corps and ensure that the proposed program includes a systematic analysis of missions, the objectives to be achieved, alternative methods of accomplishing objectives and the proper allocation of resources through Future Years Defense Program (FYDP) development to summarize all forces, resources and equipment associated with the approved program.



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### **Sustainable Cost Reduction (SCR)**

Given the increasing pressure in the DoD and the Navy to reduce costs due to the ballooning federal deficit, to invest in programs that optimize capability, mission execution and return on investment, and to ensure readiness, leadership requires unprecedented accountability for operations and program performance. Disciplined cost management is critical in achieving transparency and accountability. Traditional cost-reduction approaches typically fail to achieve the targeted reductions, take longer than anticipated and allow costs to creep back to historic levels. Guidehouse helps organizations reduce costs in a sustainable way to carry efficiencies far into the future.

In contrast with “one-off” cost-reduction programs and interventions, Sustainable Cost Reduction (SCR) involves a progression of activities. It entails a series of steps in a journey that an organization can take to more-effectively identify cost-reduction opportunities and sustain those cost reductions over the long term. SCR is divided into three primary phases to allow organizations like the DoD and the Navy the flexibility to build efficiencies. Each phase includes proprietary diagnostic tools and templates to innovate processes and eliminate waste.

The Guidehouse approach is also modular and can thus be applied to specific needs without following the methodology end-to-end. This approach provides agencies with a proven way to create transparency, accountability and transformation—an end state which may result in continued funding, the expansion of value-added programs and significant savings.

The three primary phases include: (1) a menu of assessments (e.g., workforce assessments to align work and resources, program change impact assessments, technology assessments, cost and data integrity assessments and other operational assessments) to “find” costs and enable transparency and accountability; (2) performance improvement ideas (via strategic alignment of goals, objectives and metrics, continuous process improvement tools/methods, technology transformation, insertion or enhancement and other approaches) to transform operations and affect true cost take-out; and (3) initiatives that enable “sustainable” change (e.g., enterprise risk management, governance, balanced workforce, change management) and foster the ability to retain savings and redirect funding to higher priorities.

## **Project Management Support**

### **Portfolio Management (PfM)**

Every year, the Government Accountability Office (GAO) conducts a review of the Department of Defense's major weapons programs. This year, the GAO assessed 82 programs that will cost a combined \$1.69 trillion. The programs collectively lost \$2.2 billion in buying power with no change in quantity, meaning that it will now cost more to buy the same capability. According to the GAO, the major culprit in these losses is the absence of portfolio management. In 2007, the GAO recommended that the DoD implement a department-wide portfolio management approach for its weapons system investments. The GAO assessment included a comparison of the DoD's processes with industry best practices.

Guidehouse brings extensive capability and background as a commercial provider of PfM to the DoD, NAVSEA and Team Submarine. Guidehouse's PfM vision is to provide a model for delivering strategic change. This is facilitated through four key enabling activities: creating insight, driving efficiency, maintaining alignment and providing control. Every activity features crucial elements of delivery excellence, which underpin the way we work in each sphere.

Creating insight involves governance-enabling decision making and engaged stakeholders. Driving efficiency encompasses high-performing teams and embedded life-cycle assurance and learning. Maintaining alignment entails clear scope and focused benefits management. Providing control comprises managed risk and opportunities, delivery-enabled planning, smart cost and financial management, active quality management, agile change control and integrated suppliers. Guidehouse can help NAVSEA and Team Submarine with PfM and the associated decision-support processes.

### **Independent, Integrated Program Review (I2PR)**

The Navy, NAVSEA and Team Submarine are continuously striving to improve mission and program capabilities, and submarine program life-cycle management and execution. At Guidehouse, we believe one of the critical success factors to achieving positive results for program outcomes is ensuring that risks are consistently and accurately identified throughout the life of the program. All too often, however, the senior leaders in the DoD who oversee many of these efforts are shielded from effective risk identification until much too late. Those decision makers thus have a limited ability to engage in the proactive problem solving that is necessary to keep programs on track.

To assist program managers, program executive officers and other senior leaders in providing early and effective problem solving, Guidehouse offers its clients an Independent, Integrated Program Review (I2PR)—a rapid assessment of program risks that can be utilized across virtually any kind of program. I2PRs provide senior program officials with independent, objective insights into program risks to support timely decision making on how to best respond to the highest priority risks identified in the review.

An I2PR is a systematic approach designed to review, observe, assess, integrate and report findings regarding a program's likelihood of successfully executing and delivering its intended outcomes and benefits. An I2PR performs an integrated assessment of the critical aspects of program management, including communication, contracting, cost, human resources, logistics, risk, schedule, scope and internal/external integration. An I2PR benchmarks a program against Guidehouse's "Characteristics of a Successful Program". Upon completion of an I2PR, program leadership is provided with: (1) a dashboard that provides the ability to quickly visualize the health of the program—and the ability to drill into any identified risks; and (2) insight into relevant courses of action(s) to be taken to remediate challenges and maximize the program's likelihood of success.

## Enterprise Risk Management (ERM)

Organizational enterprise and specific program missions are growing increasingly complex, with unprecedented levels of risk threatening successful mission and program execution. Adding to the complexity of managing risk are the rapid pace of change, global interdependence and the increasing speed of information flow. Advancements in technology have spawned new operational models that aim to address these changes, while attempting to mitigate a landscape of ever-changing threats. As a result of this environment, risks—and dangerous failures to manage them—are more visible than ever. Managing risk in silos is no longer sufficient in this context. Risk must be looked at holistically, from an overall enterprise perspective.

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An effective Enterprise Risk Management (ERM) program can provide the Navy, NAVSEA and Team Submarine with better information to make more informed decisions and can help the Navy understand and respond to risks before they manifest into issues. ERM programs can also lead to the kind of risk awareness that supports embracing certain kinds of risks that can be integral to pursuing innovative solutions in order to enhance mission delivery. Guidehouse's approach to ERM is grounded in the industry-leading Committee on Sponsoring Organizations (COSO) Enterprise Risk Management Integrated Framework, of which Guidehouse is the principal author.

ERM is a strategic business discipline that addresses the full spectrum of an organization's risk, beyond internal controls. The ERM "discipline" is carried out by following a process that prioritizes and manages risk exposure as an interrelated risk portfolio. It pulls all risk together from various parts of the organization or program to ensure that a portfolio view of risks is available at the highest levels of leadership in the interest of informed decision making. Guidehouse works collaboratively to construct ERM programs that are woven into each organization's fabric, recognizing that cultural adoption is just as important as the establishment of ERM operational mechanisms.



## Modernization, Reliability/ Maintainability Improvements and Logistics Support

### Operations Performance Improvement

As the NAVSEA Strategic Business Plan reminds us: “The success of the Navy starts and ends with the ships we service and produce”. As NAVSEA and Team Submarine strive to set the “value-added” standard for acquisition engineering, business and maintenance, the need and the desire for performance improvement is a common thread for all aspects of operations.

At Guidehouse, operations performance improvement includes:

- /// **Product/system or service innovation and development**, across the spectrum of innovation strategy, product/system and service support strategy, development execution and product or system life-cycle management—building the bridge from ideas to results.
- /// **Procurement and sourcing**, to transform procurement into a more strategic function with strong cross-enterprise linkages and financial impact, with analytical skills to rapidly identify and realize cost savings while improving service levels and mitigating risk.
- /// **Production and supply chain operations** to help: (1) develop and implement production and supply chain strategies that balance flexibility, cost and other goals while delivering superior performance; (2) define and implement leading, technology-enabled planning capabilities that better define customer demand and align capacity across the enterprise and the extended supply chain; (3) improve fulfillment of customer demand and return on inventory; (4) improve logistics while balancing cost and service objectives; and (5) lower cost and increase customer satisfaction by improving field service, reverse logistics, spare parts and warranty/repair operations.
- /// **Asset life-cycle management** to help: (1) improve the installed asset base and capital expenditures through capital portfolio management, effective project selection and robust strategies to operate and maintain assets; (2) assist with the end-to-end process of planning, designing, procuring, constructing, implementing, commissioning and decommissioning complex projects; and (3) improve the upkeep and reliability of vital assets by applying leading practices in identification, planning, scheduling and execution of maintenance activities.

Guidehouse also continues to help the Navy, other parts of the DoD and the public sector, the international defense community and the private sector—especially the aerospace and defense communities—with enterprise business transformation and continuous process improvement (CPI). Our approach focuses on all the critical enterprise transformation enablers, including mission and business processes, management controls, organization, culture, data, metrics and technology.

## **Supply Chain Risk Management (SCRM)**

Unlike the generally siloed supply chain structures of the past, the current global economic and international defense environment includes offshore production, sourcing materials from different locations and numerous partnerships between nations and suppliers. Increasing interactions of global supply chain networks complicate the assessment and quantification of supply chain risk. Growing complexity in a supply chain adds to risk-management uncertainty. The Navy supply chains have evolved into enormously complex systems that often span the globe when it comes to technology and service providers, not to mention sources of raw materials. This has created a globally interconnected supply chain and increased the potential supply chain attack surface to be targeted by threat actors. This development exposes the supply chain to impacts from corporate transactional activity such as mergers and acquisitions, joint ventures, asset sales and strategic partnerships. The further removed a risk is from the Navy and the DoD, the less transparent its exposure is. The associated increase in supply chain risks directly impacts program and mission execution and success.

The World Economic Forum categorizes risks into five categories: economic, environmental, geopolitical, societal and technological. Within these categories, the most significant supply chain risks include cyber breaches, extreme weather, global governance failure, terrorism, major systemic financial failure, volatility of energy prices and resource supply vulnerability. Current solutions for supply chain risk management fail to accurately account for potential risks.

Guidehouse is focused on helping industry and defense organizations, such as the Navy, succeed in today's supply chain risk environment through balancing an enhanced understanding of the end-to-end (E2E) supply chain with all available risk management options. By incorporating proprietary and third-party data, a network analysis approach, advanced analytics and Guidehouse's supply chain subject matter expertise, Guidehouse is helping organizations to understand their supply chains and manage the associated impacts of potential supply chain risk events.

## **General Support**

### **Cyber Security and Cyber Threat Detection for Weapon Systems**

The NAVSEA Strategic Business Plan establishes cyber security as a mission priority and one of four focus areas, with special emphasis on: the "culture" of cyber security, cyber security awareness and compliance, the integration of cyber security in Navy products and cyber security certification, assessment and authorization. The Navy, NAVSEA and Team Submarine continue to become more dependent on cyberspace, as cyber threats continue to increase, and technology evolves and advances. Evolutionary and adaptive cyber capabilities—including, in addition to the required technology, well-trained and responsive people, along with agile processes, operations and infrastructure—are critical to maintain a competitive advantage and provide cyberspace defenses that "protect, detect, characterize, counter, and mitigate" unauthorized activity and vulnerabilities.

The Navy faces an unprecedented threat environment about operational cyber security and needs a comprehensive approach to managing cyber risks for Navy weapon systems. Cyber risks span the life-cycle of Navy weapon systems from acquisition, to operation and disposal. The Navy must develop the ability to look deeply into its weapon systems' life-cycle supply chains to identify potential threats and vulnerabilities and manage the associated risks. These threats should then be fed into a risk management framework and used to prioritize and drive solutions across the system life-cycle. The Navy seeks a Cyber Threat Management Framework that can better assess the threat environment and manage risks, and then prioritize solutions for mission assurance and safety across the acquisition system life-cycle.

Guidehouse has introduced a Cyber Threat Management Framework at NAVAIR. Guidehouse's approach to providing this framework is to assess the threats and process changes needed in an iterative and agile fashion on a single platform. This assessment identifies and prioritizes vulnerabilities and risks and determines which systems engineering processes need to be reengineered. Security systems engineering principles and guidelines are embedded throughout. Guidehouse then develops a roadmap to implement the process changes, thereby mitigating the threats, vulnerabilities and risks identified.

Guidehouse has one of the **largest cyber security practices in the world. We deliver cyber security services to over a dozen major federal civilian and defense agencies (e.g., DHS Headquarters, the DHS National Cyber Security Division, the DHS National Protection and Programs Directorate, the DHS National Communications System, the Transportation Security Administration, the U.S. Coast Guard, the intelligence community and the DoD CIO), as well as large, multinational organizations, including six of the Fortune "Top Ten Companies."**

### **International Fleet Support**

Admiral John Richardson, like each Chief of Naval Operations (CNO) before him, has regularly expressed the importance of Security Assistance (SA) in the maritime domain. Released in February 2015, the new National Security Strategy for 2015 reaffirms U.S. foreign security assistance as a key part of U.S. efforts to address counterterrorism and prevent conflict abroad.

The Maritime Security Cooperation Policy renews the DoD's focus on preventing war, operating in new and flexible ways and being postured to prevail should conflict arise. The policy's overarching objective is to increase coordination and integration across the three maritime services for the planning and conduct of theater-level security cooperation that will increase the capability and capacity of partner nations' maritime security forces and their supporting institutions, increase interoperability and strengthen regional and global stability. Guidehouse, as a provider of support services to the Navy, Marines and Coast Guard, is well positioned to support this strategic initiative.

Guidehouse brings a global presence to NAVSEA and Team Submarine. Our consultants have provided International Fleet support to the Royal Australian Navy's Collins class submarine program and the Royal Navy's **Vanguard class submarine program. We currently support U.S. Department of Navy (Don) programs in Japan and Korea, allowing us access to our OCONUS offices and resources.**

## About Guidehouse

Guidehouse is a leading global provider of consulting services to the public and commercial markets with broad capabilities in management, technology, and risk consulting. We help clients address their toughest challenges with a focus on markets and clients facing transformational change, technology-driven innovation and significant regulatory pressure. Across a range of advisory, consulting, outsourcing, and technology/analytics services, we help clients create scalable, innovative solutions that prepare them for future growth and success. Headquartered in Washington DC, the company has more than 7,000 professionals in more than 50 locations. Guidehouse is a Veritas Capital portfolio company, led by seasoned professionals with proven and diverse expertise in traditional and emerging technologies, markets and agenda-setting issues driving national and global economies.

For more information, please visit: **[guidehouse.com](https://www.guidehouse.com)**