



DEPARTMENT OF THE NAVY

INFORMATION SUPERIORITY VISION 2.0

OPTIMIZE | SECURE | DECIDE



MESSAGE FROM THE SECRETARY OF THE NAVY

The DON's first *Information Superiority Vision (ISV)* in 2020 described our north star of achieving information superiority by securely delivering the right information to the right place at the right time at the speed of mission by modernizing, innovating, and defending.

At the time, we assessed ourselves as being 15–20 years behind industry technology benchmarks. The below examples illustrate how the DON has made significant progress since then to close this gap.

Modernize: We moved more than 710K users to cloud-based Office 365 that provides them with industry-standard collaboration, storage and email solutions secured using Zero Trust principles.

Innovate: The DON has innovated with leading edge technologies and new processes. Examples include assessing the applicability of 5G cellular mobile communications; demonstrating the feasibility of providing low latency, high bandwidth capabilities to afloat units with Proliferated Low Earth Orbit satellite connectivity; instituting and successfully exercising a process for approving enterprise services; and developing design concepts for speeding the adoption of new capabilities.

Defend: We began our Cyber Ready initiative, which will move the DON from its current ineffective compliance-based cybersecurity approach to one based on readiness that will improve DON's defenses, reduce risk, and speed delivery of secure capabilities.

We will continue working to achieve and maintain parity with industry where it makes sense so the DON can be more lethal, increase its business agility, and improve the customer experience from tactical to enterprise environments while maintaining a high level of security.

We have lived and learned much in the last four years: we can move fast, IT is never done, innovation is continuous, and data has become increasingly important. Industry focus has also evolved – witness the advances in generative Artificial Intelligence, and the prevalence of Zero Trust. Combined, these lessons and developments have driven us to update the pillars of our vision, but we remain focused on building information superiority because DON needs it to win the naval fight.

For *ISV 2.0*, the key pillars are **Optimize**, **Secure**, and **Decide**. We will continue to build and support an agile and resilient Information Environment that gives us competitive advantage while maximizing the effectiveness of our investments. Our data, systems and networks will be secure and survivable by design and kept so throughout their lifecycles. As we become a "data first" organization, we will make data ready to enable warfighting and business decision advantage. Finally, we will achieve these strategic objectives by having a skilled and ready workforce and fostering a culture of continuous innovation.

To realize this vision, we will establish north stars and build out roadmaps for the supporting initiatives that are aligned to Service strategies and blueprints. Many of these initiatives will require the collective energy of the entire Department, and we will work collaboratively to ensure governance, management and execution controls needed to move with urgency are in place in a disciplined way that ensures we achieve the desired outcomes.

Guided by *ISV 1.0*, we have become more competitive. We have no choice but to continue advancing rapidly, and I am confident that our updated vision will strengthen our maritime dominance so we can fight and win both now and in the future.

Carlos Del Toro
78th Secretary of the Navy



INTRODUCTION

Information Superiority Vision (ISV) 2.0 is about urgently solving mission problems, accelerating emerging technology, and getting better at the business of IT to enable our Sailors and Marines to fight through and win in a contested Information Environment today and in the future. It maintains the *ISV 1.0* desired end-state of securely and affordably delivering needed information from anywhere to anywhere to support warfighters at the speed of mission, and builds on the 1.0 key pillars of Modernize, Innovate and Defend.

For *ISV 2.0*, the key pillars are **Optimize**, **Secure**, and **Decide**.

Optimize. Prioritized, agile, resilient, and relevant Naval Information Environment.

Competitive advantage is grounded in a strategically architected, secure, adaptable, and agile Information Environment responsive to the continuously evolving demands of the warfighter. The optimized Naval Information Environment is a platform unto itself enabling interoperability and maneuverability; capable of supporting all missions and functions across the DON and the Joint Force. The key tenets of optimize are simplify; build once, use often; eliminate unnecessary redundancy; continuously innovate; leverage best practices; align and prioritize investments to maximize mission outcomes; and continuously measure effectiveness.

Secure. Defendable and survivable by design.

It is our collective responsibility and part of the DON's culture to ensure our networks, platforms, systems, and data are secure from day one. We have pivoted from "Defend" to "Secure" because we realize continuous action is needed to proactively protect and ensure survivability in every part of the capability lifecycle. Core to Secure is a workforce with a strong sense of personal cyber responsibility, trained and capable operators and defenders who actively secure the environment, constant cybersecurity awareness, continuously validated defenses, and automated tools to support risk-informed decision making.

Decide. Maneuverable data driving decision advantage.

In *ISV 2.0*, data is the main attraction. Trustworthy, secure data will be accessible and used in all phases of DON operations to increase warfighter lethality, increase velocity, and achieve mission outcomes. Technical solutions will be purposefully designed to enable data movement, interoperability, and discovery. Decision advantage will be driven by a skilled data workforce generating authoritative and integrated analytics and AI products.

Relentless innovation, whether DON-driven or adopted from others, is key to delivering world-class capabilities across the Information Environment. We will actively seek out and engage the evolving technology ecosystem, experimenting with leap-ahead opportunities that we can rapidly and effectively transition to the DON to better equip our Sailors, Marines and Civilians while maintaining or improving quality of service and user experience along the way.

A robust, agile, and capable cyber workforce is crucial to the success of *ISV 2.0*. We will seek out best-in-class talent and create an environment where people can unleash their full potential and a culture where continuous professional growth is valued and achievable.

The following are the major initiatives for each pillar, with those added since *ISV 1.0* highlighted in **Blue**.

OPTIMIZE

Prioritized, agile, resilient, and relevant Naval Information Environment.

Modernize the DON Information Environment. Drive and incentivize unity of effort towards an integrated and interoperable Information Environment that optimizes capability during competition, crisis, and conflict. Accelerate transition to this end state by leveraging commercial and existing solutions that are most impactful. Follow this approach for delivering modern cloud services, optimizing DON's remaining data centers, upgrading and diversifying networks and transport to the tactical edge, and improving other elements of the technology stack.

- **Accelerate cloud adoption.** The future state is an integrated cloud environment that allows data maneuverability from the tactical edge to the enterprise at the speed of relevance. Prioritize movement to the cloud, provide standards and guardrails that ensure frictionless movement of data across a multi-cloud environment, and architect the cloud ecosystem to minimize its footprint and enhance command and control.
- **Adopt enterprise services.** "Build or buy once, use often" by delivering or leveraging modern core enterprise IT services that reduce complexity, optimize investments, and improve the customer experience.
- **Deliver a secret data-centric ecosystem.** Implement a single fabric that supports data of all classifications based on the principles of Zero Trust. Increase our decision advantage by speeding access to data of different classifications for us and our mission partners.
- **Improve the customer experience.** Improve the digital work environment so customers can securely access their data anywhere on any device with performance on par with industry best-in-class experiences.
- **Employ commercial technologies today.** Accelerate adoption of game changing commercial technology, such as satellite communications, to provide ubiquitous, resilient, low latency, high-speed communications for warfighting, combat support, quality-of-life, and quality-of-work solutions.
- **Follow modern software development practices.** Deliver resilient software at speed and scale by accelerating adoption of DevSecOps practices and integrating security and operational resilience at every phase of the software development lifecycle. Scale adoption of modern software tool chains that will enable AI and Machine Learning capabilities.

Manage the Business Mission Area (BMA) as a portfolio.

Adopt an enterprise mindset within the BMA that prioritizes the portfolio over individual efforts. Improve business operations and decision making by delivering modern, resilient, integrated technology platforms, services, and analytics capabilities that support re-engineered, common, end-to-end processes based on best practices. Ensure BMA capabilities are effectively postured to execute in a contested environment. Establish BMA governance and priorities to ensure timely investments and measurable outcomes.



Double down on Cattle Drive. Accelerate the divestment of technical debt and reduce operational risks by identifying, assessing, and eliminating obsolete systems. Identify divestment opportunities by conducting horizontal and vertical program reviews, and rationalize systems using standardized, data-driven processes.

Ensure access to needed spectrum. Vigorously advocate for the DON position on spectrum in all forums. Protect spectrum critical to DON's mission and our national security by leveraging advanced and emerging technology and collaborating with industry and maritime stakeholders to dynamically share needed spectrum and build spectrum agile systems.

SECURE

Defendable and survivable by design.

Move to Zero Trust. Improve DON's cybersecurity posture by adopting and integrating Zero Trust capabilities, technologies, solutions, and processes enterprise-wide, starting with networks. Prioritize identity, which supports Zero Trust, and incorporate Zero Trust in all new capabilities.

Scale Cyber Ready. Accelerate the movement to real-time cyber defense of all mission functional enclaves. Reduce risk, and speed capability delivery by shifting from a compliance mindset to a Cyber Ready approach, where the right to operate is earned and managed every day. Achieve this by continuously monitoring cybersecurity; actively correcting vulnerabilities in near real time; validating defenses with automated, threat-informed assessments; making risk-informed decisions; and fully integrating cybersecurity in the acquisition process.

Partner to secure the Defense Industrial Base (DIB). Partner with the DIB and DIB stakeholders to improve the security of DON data safeguarded by our industry partners with a preference for innovative cybersecurity solutions that provide real-time warnings, protections, corrective actions, and insight.

Manage cybersecurity as a shared capability portfolio. Because there may be common cybersecurity solutions across multiple platforms, invest in cybersecurity management and operations holistically (people, processes, technology, and policy) to ensure applications, systems, and platforms are protected effectively and economically across their entire lifecycles.

DECIDE

Ready, maneuverable data driving decision advantage.

Value a data-first mindset. Transform the DON into a modern, data-fluent organization that produces and consumes data effortlessly in execution of both warfighting and business missions. Delivering decision advantage through authoritative analytics and AI products requires robust and sustained effort to mature our Naval data architecture, adopt mission-enabling governance and standards, and advance DON's data skills.

- **Mature the Naval data architecture.** Improve how data is managed so it provides warfighting and business decision advantage at the speed of relevance by:
 - Delivering Jupiter as an enterprise service
 - Rationalizing data analytics platforms
 - Establishing and integrating data hubs as part of our data mesh
 - Increasing senior leader outreach
- **Adopt standards.** Develop and adopt purposeful enterprise standards for using, managing, representing, and sharing data thus removing friction as data traverses our enterprise seamlessly and securely.
- **Improve governance.** Execute integrated and mutually supportive data, analytics, and AI governance.
- **Shape culture.** Break down IT systems silos and the culture of ownership by demonstrating the power of shared data in regularly scheduled engagements with the Fleet.

Advance analysis and AI. Make DON organizations, infrastructure, and data ready to support advanced analysis and the full range of AI modalities – at speed and at scale – in support of our warfighting readiness and business functions by:

- **Maturing catalogs.** Make data more visible, accessible, trusted, and understandable for integration and analytics by building out data catalogs. Speed delivery of analytics and AI capabilities and reduce duplicative work by developing a Naval analytics and AI catalog.
- **Delivering analytics capabilities.** Meet mission needs across the enterprise by accelerating self-service analytics with Data Strike Teams that develop, test, and support solutions for analytics use cases.
- **Enabling AI.** Develop and implement a data-tagging and data movement strategy to smartly employ analytics and AI from the enterprise to the tactical edge.

Jane O. Rathbun
Chief Information Officer
Department of the Navy



ENSURE SUCCESS ACROSS THE KEY PILLARS

Innovation. Actively scout game changing technologies, practices, and processes that can expedite our competitive advantage. Leverage partnerships inside and outside of the government to identify promising solutions sooner, and rapidly provide new and improved capability to our warfighters using Structured Piloting to accelerate progress through Investment Horizons. As we foster a culture that encourages and rewards innovation, mission outcomes will improve faster and the pipeline of creative doers, ideas and candidate solutions will grow towards outright overmatch.

Workforce. To adapt our workforce to the evolving cyber domain, create a best-of-breed culture that combines government, military, academia, and industry best practices in a uniquely managed cyber workforce functional community. Within that functional community, recruit, develop, retain, and manage a mission-ready, modern, highly proficient cyber workforce of the right size and mix of skills to achieve and maintain information superiority.