

DEFENSE INTELLIGENCE AGENCY



2013 DIA Innovation Strategic Plan



COMMITTED TO EXCELLENCE IN DEFENSE OF THE NATION
One Mission. One Team. One Agency.

COMMITTED TO EXCELLENCE IN DEFENSE OF THE NATION
One Mission. One Team. One Agency.

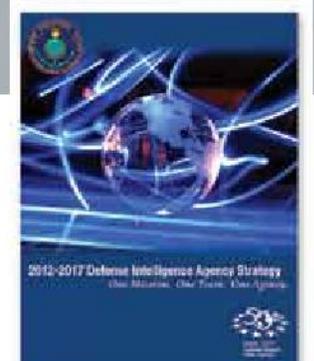
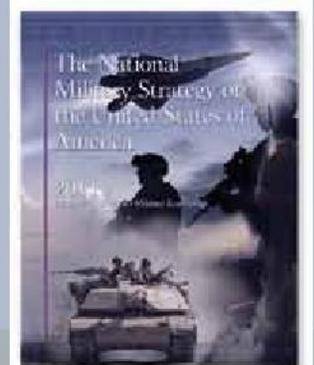
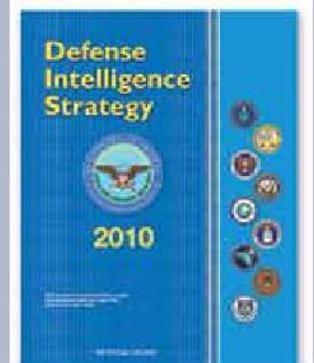
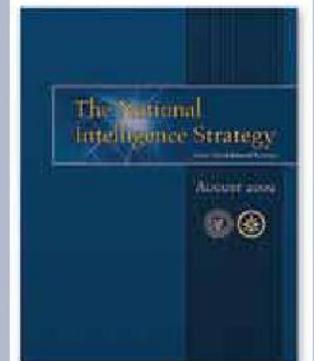
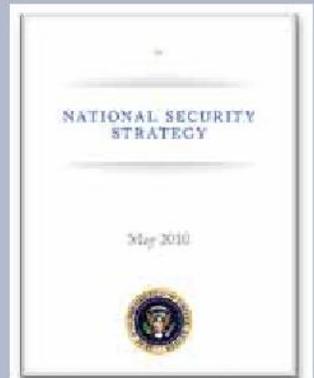
Cover photo by Mike Fisk, <http://soul-amp.com>

Unless otherwise noted, photos courtesy of DoD.

DIA protects the environment while protecting the nation. This product is printed on recycled paper.



2013 DIA Innovation Strategic Plan





Innovation Imperative

A dynamic international landscape, growing budget austerity, and a technology horizon where disruption is commonplace create an imperative for innovation. Innovation is the driver for productivity gains, the ability to do more with less. To be innovative, the Defense Intelligence Agency (DIA) must build agility into the core of all activities enabling us to address tomorrow's challenges more efficiently and effectively. An innovation friendly environment enables the best ideas, big or small, to emerge from anywhere, spread rapidly through awareness and supportive policy, and accelerate in growth proportional to impact.

A decade of war has shown that empowered individuals driven to accomplish the mission can overcome any obstacle. We must apply this same urgency to the strategic threats we face. Innovation begins with our workforce, at every level, attacking each challenge

by asking "Why can't I...?", questioning all assumptions, and pursuing solutions with a healthy respect for the practical constraints of our environment. It refuses to accept the status quo when better, faster, more successful paths to mission success can be achieved.

The whole workforce is critical as a part of the innovation team. We must empower problem solvers through bureaucratic, technical, and policy reform to minimize the time, resources, and political capital required to move from good idea to mission impact. Innovation is not solely about technology. It involves people, training, processes, and a host of other activities—we're only limited by our imagination (or lack of it).

The formula for innovation is not a mystery. Across DIA, we have seen that three conditions, when combined, consistently result in rapid adaptation and dramatic mission impact:

- ▶ Mission-focused cross-functional teams;
- ▶ Broad reach into mission relevant data and;
- ▶ Unfettered access to tools with the ability to adapt.

We must scale these conditions to the DIA enterprise by building agility into our core processes and knocking down barriers that hinder the transformation of ideas to action.

Time is short. Our adversaries will not wait for us to adapt (they won't take a strategic pause while we get our act together). Innovation gives DIA an edge putting us on the offensive, reducing the probability of strategic surprise, and defending the Nation against threats that are moving from tactical to strategic. If we fail to innovate, we are on the road to obsolescence. We are committed to drive relentlessly until DIA is established as an innovation leader in the Intelligence Community.



Michael T. Flynn
Lieutenant General, USA
Director, Defense Intelligence Agency

Innovation Office (INO)

Defense Intelligence Agency (DIA) leadership has committed unequivocally to innovation as a top priority for the agency. Our relevance rests in large measure on the Agency's ability to improve efficiency, effectiveness, and security through innovation in an era of rapidly declining resources and increased demand for products and services. Strategic focus and execution are required to address systemic barriers undermining agency agility, limiting creativity, and impeding the flow of resources to the best ideas.

To execute on the commitment to innovation, DIA leadership has established the Innovation Office (INO). INO is responsible for the establishment of an innovation-friendly environment across the Defense Intelligence Enterprise. This environment is designed to match the best ideas, big or small, from inside or outside the organization with mission needs even if we did not know to look for them. The INO is actively engaged in unleashing the creativity of DIA's workforce and empowering problem solvers to quickly turn ideas into solutions. Establishing an infrastructure of "systematic opportunism" supports the generation, mobility, and growth of ideas and will unlock new possibilities enabling us to tackle current and future challenges efficiently and effectively.

Mission

Build into the core of all DIA activities Leadership, Empowerment, Agility, and Partnerships unleashing the creativity and productivity of the entire workforce to meet current and future defense intelligence requirements.

Vision

DIA: An environment empowered to solve problems and improve performance through innovation.

Values

Leadership: Innovation requires leaders driven to find solutions to mission needs

Empowerment: To be innovative, DIA must unleash the creativity of the entire workforce

Agility: Innovation relies on the flow of resources from underperforming capabilities to newer, better ideas

Partnerships: To be an innovation leader, an organization must efficiently leverage ideas, practices, and capabilities created anywhere especially outside the organization



"The organizations of the future will increasingly depend on the creativity of their members to survive ... In a truly creative collaboration, work is pleasure, and the only rules and procedures are those that advance the common cause."

— Warren Bennis

Ideas to Action

“Ideas to action!” is the mantra for innovation at DIA. As one team, we can unleash workforce creativity, productivity, and agility by supporting the conversion of ideas to action and action to mission impact. The innovation challenge in many government agencies is not the result of a shortage of ideas, but rather the difficulty in efficiently turning ideas into action. To be innovative, we must work together by surfacing ideas, socializing, refining, deconflicting, triaging, aligning a need with the means to implement, and seeking internal or external resources to deliver mission impact.

The Innovation Development Process (IDP) is an agile, transparent, systematic process based on practices from the venture capital community designed to connect need to solution. Through the IDP, resources can be aligned to the best ideas that meet emerging needs too transient for the Agency’s formal planning processes. INO supports the Innovation Development Process by providing support and mentorship to idea creators helping ensure that all ideas are given the opportunity to find fertile ground and flourish based on their merit.

Activities in the IDP center on two groups: the Innovation Advisory Board (IAB) and the Innovation Advisory Working Group (IAWG). The IAB chaired by the DIA Deputy Director, is a voting body that provides crisp decisions on whether to proceed with innovation initiatives and oversees execution of supported pilots. The IAWG supports the refinement of ideas and matches need to solution. Membership on the IAWG is open to all members of the DIA workforce who have an interest in turning ideas to action. Whether you have a need, an idea, a solution, resources, or the wherewithal to deliver, you can participate – please join in!



“Everyone who’s ever taken a shower has had an idea. It’s the person who gets out of the shower, dries off and does something about it who makes a difference.”

— Mary Kay Ash





“Creativity is thinking up new things. Innovation is doing new things.”

— Theodore Levitt

More Leadership, Less Management

Creating an innovation friendly environment requires more leadership, less management. Management is about taking control, creating plans and structures to achieve a known outcome. But innovation is a process of adaptation, resistant to planning, often with unforeseen outcomes that can be undermined by overwrought management structures that unwittingly, by their nature, view unplanned, emerging ideas with transformational potential as a management challenge to be avoided.

Innovation leadership is about giving control, empowering problem solvers to meet mission needs. It is not about implementation of the next big thing, but rather creating an infrastructure that unleashes the creativity of the workforce. This infrastructure embraces volatility¹ through a bureaucratic, technical, and cultural environment that supports the emergence of the best ideas, regardless of origin, and the displacement of ideas and systems that cannot compete.

Establishing an infrastructure of “systematic opportunism” requires strategic leadership. Like the creation of the Interstate Highway System, this infrastructure supports the mobility and growth of ideas and will unlock unforeseen possibilities enabling us to tackle current and future challenges with agility.

*“...Management is about taking control...
Leadership is about giving control...”*

¹ Nassim Nicholas Taleb, “Learning to Love Volatility”, *Wall Street Journal*, November 16, 2012.

“Management is doing things right; leadership is doing the right things.”

— Peter F. Drucker



Innovation is everyone's responsibility

INO should not be seen as the source of good ideas for the agency. Nor is it tasked with the invention of the “next big thing.” Rather, innovation is the responsibility of the entire workforce. Good ideas can emerge from any level or any office in the organization. Each organizational element has an important role in making DIA a leader in innovation.

Innovation can't be confined to one department or an elite group of star performers. It cannot be assigned to a skunkworks far afield from the main organization and insulated from the company's bureaucracy. It must permeate the company, and it must encompass new products, services, processes, strategies, business models, distribution channels, and markets. It must become part of the DNA of the entire organization.²

INO does not have an implementation arm by design. Past experience shows that the temptation is too great to innovate for innovation's sake. Instead to facilitate innovation, INO must match ideas with mission needs, involve stakeholders, and build coalitions to deliver impact. In this way, INO augments rather than competes with existing organizational structures. Any element in the DIA enterprise can inject fresh ideas to overcome mission challenges by partnering with INO.

The DIA innovation strategy relies on collaboration. There are mechanisms for all to engage whether inside or outside the agency. Identifying a mission impacting problem, idea, solution, need, or resource is key. Be vigilant. Get involved. Converting “ideas to action” cannot happen without your passion and confidence in our agency, our mission, and our future.

² Robert B. Tucker, *Driving Growth Through Innovation*, Berrett-Koehler Publishers



*“The most dangerous phrase in the language is,
‘We’ve always done it this way.’”*

— RADM Grace Hopper, USN



“The essential part of creativity is not being afraid to fail.”

— Edwin H. Land

2012-2017 DIA STRATEGY, GOAL 3: PARTNER AND INNOVATE TO GAIN ADVANTAGE

DIA's **One Team** will improve information dissemination and access to interagency capabilities by leading or joining U.S. whole-of-government networks while strengthening and establishing new mission partnerships with other elements of the U.S. Government, academia, the private sector, and foreign partners. Long-term, interagency collaboration with agencies whose missions have significant global components is particularly vital. Given the expansive, open-source environment—combined with social media, rapidly developing new technologies, and growing mission partnerships in an era of diminishing resources—DIA will become increasingly dependent on outside sources of knowledge to succeed in its mission.

Objective 3.3: Empower Innovation

To be innovative, DIA must unleash the creativity of the entire workforce: Unleashing innovation at DIA starts with empowering mission elements. As One Team, each analyst, collector, warfighter, and enabler has an important role in transforming DIA. Passionate individuals driven to positively contribute to the accomplishment of the mission create new ideas to address agency challenges regularly. DIA must

amplify this creativity by: providing easily accessible environments to test and extend new approaches; aggressively proliferating the best models, tradecraft, and capabilities that emerge; minimizing bureaucratic structures that drive organic edge innovators to hide rather than share; and maximizing awareness of and access to transformative capabilities and practices available elsewhere in the enterprise and commercial sectors.



“Nothing is so embarrassing as watching someone do something that you said could not be done.”

— Sam Ewing

INITIATIVE 3.3.1: EMPOWERMENT

Scale successful models in innovation cells to the enterprise by empowering the mission edge.

Task 3.3.1.1: Facilitate the surfacing, vetting, refinement, and implementation of workforce generated ideas

Through crowdsourcing, the creativity of the workforce is brought to bear on identifying challenges requiring innovation and developing creative solutions to these challenges. The Innovation Development Process³ captures ideas from the workforce and external sources, vets and refines them through the Innovation Advisory Working Group (IAWG). If “quick win” pilot solutions are achievable, initiatives are resourced via the endorsement of the Innovation Advisory Board (IAB) and approval of the Director and implemented through an Innovation Champion. Solutions that require longer delivery horizons or significant resources are forward to appropriate elements for planning, resourcing, and implementation.

Task 3.3.1.2: Drive first class infrastructure delivery emphasizing agility and empowerment

Currently, mission elements wait days, weeks, or even months for access to information technology

resources (compute, storage, networking, applications, consulting, etc). Delays create friction handcuffing problem solvers and undermining a “start small, scale fast, fail cheap” environment required for innovation. This is especially troubling since on demand access to IT resources by end users has been available through public cloud providers for some time. Through automation, cloud providers offer services that are more agile, scalable, auditable, and efficient than our legacy models. With advances in automated IT Asset Management and continuous compliance monitoring, it is possible to enable mission elements to access IT resources instantly and securely overcoming barriers that have undermined IT delivery at DIA. Through strategic focus and reform, DIA can reap the full benefits of an agile infrastructure.

Task 3.3.1.3: Facilitate solution co-creation

The rate of innovation increases when disciplines interact. By attacking mission challenges with cross functional teams of analysts, collectors, and technologists in-situ, new methods can evolve rapidly, and context gained will shape future deliveries.

³ Details on the idea discovery, refinement, vetting, and funding can be found in the Innovation Development Process Standard Operating Procedure

“So much of what we call management consists in making it difficult for people to work.”

— Peter F. Drucker

Analysts and collectors should be permitted to set aside time on a regular basis to work with technologists to improve their tools. Early and frequent interaction with end users is the principal factor in successful technology delivery and process improvement. This practice can be extended through encouraging technology rotations and streamlining mechanisms to establish cross-functional teams in risk tolerant technology environments. Methods, tools, and tradecraft that emerge from this practice should be systematically refined and extended to reach the enterprise.



“The innovation point is the pivotal moment when talented and motivated people seek the opportunity to act on their ideas and dreams.”

— W. Arthur Porter

INITIATIVE 3.3.2: AGILITY

Create an environment that facilitates innovation by removing barriers that impede progress.

- ▶ **Innovation relies on creative destruction:** The flow of resources from underperforming capabilities to newer, better ideas. Overwrought bureaucratic structures, organizational stove-pipes, long budget cycles, and inconsistent technology standards obstruct this flow and undermine innovation. History has shown that innovation thrives in a marketplace where the best ideas emerge based on demand not because of the choices of central planners. Disruptive (paradigm changing) technologies and methods are, by definition, at odds with established procedures and practices and are often discounted by planners versed in established models. Current acquisition and implementation practices rely on the judgment of IT professionals and senior decision-makers who are poor proxies for the mission elements they seek to satisfy. Decentralized decision-making, allowing end-users to “vote with their feet”, coupled with fluid resource allocation and an IT infrastructure that supports adaptation is crucial to leverage disruptive, paradigm changing emergence. The value of disruptive capabilities can only be realized through use – confounding existing requirements driven acquisition practices. Further challenging the current model, attempts to drive adoption of disruptive capabilities from the center of an organization can do more harm than good. Historically, disruptive capabilities only gain traction when grown organically from the edge in permissive environments that allow users to move, with minimum friction. Finding a balance between agility and stability in the existing federal government budgeting process is essential.
- ▶ **Task 3.3.2.1: Increase fungibility of resources**

Innovation is enhanced when resources flow to the best ideas - and by extension away from systems that do not provide value. This requires creative new models, consistent with the Federal Acquisition Regulation and DoD Financial Management Regulation that adapt to emerging ideas and changing operational demands that outpace the existing budget cycle. To take full advantage of new infrastructure models that allow for flexible provisioning of resources according to demand, agencies are beginning to experiment with credits (more fungible but linked to budget dollars) that permit bottom-up agility while expressing Commander’s Intent from the top-down. Credits allow resources to flow more fluidly across activities and provide a more accurate accounting of resource needs and value generation. They can be used to facilitate cost recovery (fee for service), an essential enabling component to a shared services strategy. Without cost recovery, service hosts face a disincentive to expose good ideas to the enterprise since the result is use without compensation – potentially undermining the original mission intent of the service. Through



“Every act of creation is first of all an act of destruction.”

— Picasso

cost recovery mechanisms, service providers have an incentive to share and may gain the benefits of economies of scale. As resources flow according to mission value, the best services will grow and underperforming services will wither.

► **Task 3.3.2.2: Eliminate “Swing for the fence” technology investment practices**

The byproduct of an arduous technology implementation process is the tendency to “go bigger” to get things done. What follows is a “too big to fail” mentality with good money following bad and tighter controls further restricting the emergence of substitute technologies. Management of large projects emphasizes risk avoidance – creating forces that tamp out innovation since new ideas have uncertain delivery modes. Long execution timelines can fail to take advantage of technological advances and may even be obsolete on delivery. Furthermore, industry has shown large projects have higher failure rates. However, even in the face of previous failures, “swing for the fence” initiatives continue to dominate as “start small, scale fast, fail cheap” initiatives go underground or perish in an environment sucked dry of resources. Overcoming this bias requires: an overhaul of decision frameworks that consider only perceived benefit, not a “size-neutral” look at return on investment (ROI); strategic planning to break sweeping initiatives into manageable, separated concerns that can be delivered piecemeal; agility in technology delivery that permits capabilities to be rolled out piecemeal and improve in rapid spirals.

► **Task 3.3.2.3: Remove bureaucratic and technical barriers to solution emergence**

Innovation benefits from transparent governance. “Kiss the ring” approval processes with unclear or subjectively enforced rules favor the insider and undermine innovation at the edge. Existing organizational structures and decision frameworks that make it easier to say “no” than “yes” should be realigned to ensure mission effectiveness is the decision driver. Complex, unwieldy governance structures constrain the solution space and favor yesterday’s technologies, restraining the emergence of new capabilities. Distributed technology development, a key to innovation, is facilitated by a technical architecture centered on a small number of clear, practical, objectively verified rules and standards. Where possible, enforcement should be automated reducing unnecessary friction while awaiting approval, eliminating opportunities for subjectivity, while increasing compliance benefits through repeatability. “Trust but verify” governance is enabled through continuous compliance monitoring (automated rule verification) permitting the agility needed to solve problems quickly while providing greater oversight than the current “look once” (and usually with significant delay) governance. Systems that conform should be fast tracked regardless of origin in the enterprise. Legacy systems must be opened to expose standardized, accessible (but secure) interfaces so that innovators anywhere in the enterprise can contribute. Openness facilitates the delivery of smaller, agile applications that leverage rather than duplicate existing capabilities.



“It’s easy to come up with new ideas; the hard part is letting go of what worked for you two years ago, but will soon be out of date.”

— Roger von Oech

INITIATIVE 3.3.3: PARTNERSHIPS

Partner to enable rapid evaluation, acquisition, and integration of promising capabilities.

To be an innovation leader, an organization must efficiently leverage ideas, practices, and capabilities created anywhere, especially outside the organization: Central to the DIA innovation strategy is deference to Joy's Law⁴, "No matter who you are, most of the smartest people work for someone else." It follows that a key to innovation is the ability to efficiently leverage ideas from anywhere: the Intelligence community writ large, elsewhere in government, coalition partners, industry, and academia. It is not enough to know that good ideas exist - a framework must be established to support discovery, rapid evaluation, accreditation, integration, and acquisition of promising technologies and methods attacking the friction that isolates us from cutting edge developments.

Task 3.3.3.1: Strengthen linkages with external idea creators

Public/Private partnerships are central to staying abreast of a rapidly changing technology horizon where disruption has become commonplace. To foster this partnership, DIA will explore new relationships with industry and academia that emphasize greater transparency and openness. DIA must also build stronger relationships with external Research and Development (R&D) activities. As consumers of R&D, we will get what we inspect, not what we expect. External research activities (DARPA, IARPA, defense and national laboratories, commercial research, academia, etc) have access to extensive intellectual and

financial resources. To leverage these resources, DIA must strengthen ties with external R&D organizations, driving mission relevant research and rapidly transitioning promising capabilities, methodologies and processes. To bear fruit, these relationships require time and resource commitment including: challenge problem development, access to mission relevant data sets or systems for evaluation, participation in evaluation committees, end user involvement, and matching funds to support transition. Ideally, external organizations would be involved in co-creation via risk tolerant technology and policy environments. Through this model, mission challenges can be worked by the best and brightest minds in government, industry and academia.

⁴ Attributed to Sun Microsystems Co-Founder Bill Joy

"The best way to have a good idea is to have a lot of ideas."

— Dr. Linus Pauling



► **Task 3.3.3.2: Establish an Open Innovation Gateway (OIG)**

The OIG is a broadly available (but controlled) environment emulating the architecture and key characteristics of mission systems designed to enable crowdsourcing – supporting the discovery of the best capabilities even if we did not know to ask. A key to crowdsourcing is to include the broadest set of constituents requiring a platform with a low barrier to entry. The environment will contain challenge problems, i.e. unclassified analogs to mission challenges. It will facilitate both analytic and technological outreach giving analysts and field components access to the best ideas available. Through the platform end-users (not just managers or acquisition professionals) can “try before we buy” enabling them to weigh in on the value of new technologies and methods. In-Q-Tel, research activities, and other sources of emerging technologies can use the OIG to showcase capabilities directly to end-users rather than forcing travel to conferences or site visits. Since the environment enforces key standards and emulates mission environment characteristics, promising technologies can be graduated from the environment and fielded rapidly.

► **Task 3.3.3.3: Establish Continuous Integration Practices and Risk Tolerant Technology Development Environments**

DIA must establish accessible, first rate development and test environments in both unclassified and classified settings. A robust, shared development and integration environment will facilitate mission element co-creation. It will also enable co-evolution of systems resulting in smaller, more modular, integrated systems with less duplication. “Perpetual beta” environments permit end user interaction with tools as they evolve, permit the development and evaluation of new tradecraft, and enable mission relevant evaluation of emerging technologies. The test and evaluation environments will complement and even overlap with the OIG enabling the integration of emerging technologies.



“If you do not expect the unexpected you will not find it, for it is not to be reached by search or trail.”

— Heraclitus



COMMITTED TO EXCELLENCE IN DEFENSE OF THE NATION
One Mission. One Team. One Agency.