The Inaugural Report

of the

Global Maritime and Air Communities of Interest Intelligence Enterprises

Director of National Intelligence

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Foreword

The Office of the Director of National Intelligence (ODNI) is pleased to present the inaugural report on the status of the Global Maritime and Air Communities of Interest intelligence enterprises and the level of integration and collaboration achieved since the mission's inception.

This report draws on input and data from the Intelligence Community (IC), Interagency, government commissions, public policy research institutions and private industry to make the widest possible assessment of the mission's status. It covers the initial development of the two communities of interest, steps taken to integrate, align and synchronize related activities throughout the IC, and progress made in inculcating and engendering a climate of collaboration between federal, state, tribal and local governments while reaching out to the private sector and our foreign partners. ODNI is leading this transformative effort based on the foundational guidance and direction of the National Commission on Terrorist Attacks Upon the United States (9/11 Commission), the Intelligence Reform and Terrorism Prevention Act of 2004 (IRTPA), and on related national strategies and plans focused on maritime and air security. Achievement of these objectives is contingent upon efficient and effective intelligence integration and information sharing in order to "connect the dots" in advance and anticipate threats before they materialize. We seek to create a decisive advantage that prevents a catastrophic attack against our people, economy, or our interests abroad. Contained within this report are the comprehensive details of IC, Interagency and private sector efforts to meet those objectives. They comprise the first steps toward an advanced state of intelligence integration and information sharing to optimally support all levels of government regarding the maritime and air domains.

The ODNI has achieved initial success in establishing the framework for increased governmental unity of effort, and for deconflicting and optimizing IC maritime and air resources. For example, the ODNI recently stood-up a National Maritime Intelligence Center and shifted related intelligence activities and positions from ODNI. However, challenges in closing institutional gaps and seams remain, especially as we pursue similar efforts in the air domain. These critical endeavors must be sustained to proactively deal with dangerous and adaptive enemies. The stakes for success in this venture could not be higher. For the physical security of our Homeland and its citizenry, and for the economy that sustains our way of life.

Contents

Tasking

This report is required by Intelligence Community Directive 902, Global Maritime and Air Intelligence Integration, effective January 14, 2009:

E. ROLES AND RESPONSIBILITIES:

3. *Office of the Director of National Intelligence*: For oversight of fiscal, legal, and policy implementation, and community of interest development the ODNI will:

j. assess strategic progress annually, the results thereof to form an Annual Report for delivery to the National Security Council/Homeland Security Council as well as the Secretaries of Defense, State and Homeland Security, and the Attorney General, describing the status of the Global Maritime Community of Interest and Global Air Domain Community of Interest intelligence enterprises, and recommending changes to authorities, responsibilities, programs, resources, and operations of the enterprise members.

Executive Summary

This constitutes the first report on the status of the Global Maritime and Air Intelligence Communities of Interest intelligence enterprises, and on the strategic progress of Global Maritime and Air Intelligence Integration (GMAII).

GMAII is a result of the 9/11 Commission's efforts to seek an integrated Intelligence Community (IC) able to "connect the dots" in advance to prevent a catastrophic terrorist attack on the Homeland. The immediacy of this mission is reflected in the persistent threat of global terrorism that has continued to exist since the Commission's findings. Exacerbating the situation is the fact that our economic vulnerability has increased due to greater dependence on international trade and the onset of the global economic downturn. The economy's inherent lack of resiliency to a major Global Supply Chain (GSC) disruption event and the current fragility of the world's economy presents a substantial opportunity for those who seek to attack our institutions asymmetrically. Our enemies' ultimate goal would be to create a "tipping point" that results in a cascade effect toward economic chaos and political destabilization on a global scale. One potential scenario would include an attack on one or more maritime ports using a Weapon of Mass Destruction (WMD) or a Radiological Dispersal Device (RDD). The stringent precautions required (and most likely demanded) to prevent another such attack would bring global trade to a halt, threatening the world with economic collapse and resultant trans-continental political instability. Those circumstances could be brought about by the use of the GSC as a means of weapons delivery, or a direct attack on its intermodal jugular points. It is instructive to note that when West Coast ports, including the Port of Long Beach, were shut down for just 10 days due to a contract dispute in 2002, it resulted in a loss to the U.S. economy of between $10 billion and $20 billion.

The Commission on the Prevention of WMD Proliferation and Terrorism reported in December 2008 that "unless the world community acts decisively and with great urgency, it is more likely than not that a weapon of mass destruction will be used in a terrorist attack somewhere in the world by the end of 2013." Further, we assess that al-Qaeda continues to pursue plans for Homeland attacks and is likely focusing on prominent political, economic, and infrastructure targets designed to produce mass casualties, visually dramatic destruction, significant economic aftershocks, and/or fear among the population. The Office of the Director of National Intelligence (ODNI) has worked with a heightened sense of urgency since October 2006 to enable the prevention of such an attack and other potential threats from the maritime and air domains by laying the foundation to implement the Global Maritime Intelligence Integration (GMII) and Air Domain Surveillance and Intelligence Integration (ADSII) Plans. The two domain missions are summed into a single overarching mission goal: *"To expeditiously enable anticipation and thereby prevention of catastrophic attack (from maritime, air and other intermodal domains) on the Homeland, United States persons, and our interests worldwide."*

The ODNI furthered that goal by developing a vision and executing a strategy to rapidly create an integrated maritime and air intelligence capability that improves U.S. national security against current and emerging threats. Corrective measures require integration, alignment and synchronization, without which, crucial opportunities for prevention or an early response to an adverse event could be lost with unacceptable consequences. Six strategic objectives comprise the supporting strategy:

- Provide leadership for maritime, air, and ultimately, transportation domain intelligence integration;
- Develop the construct and architecture to support information sharing;

- Build global communities of interest for all-source intelligence integration in the maritime and air domains to develop familiarity, leverage partnerships and facilitate concerted teamwork that is marshaled against the challenge;
- Integrate maritime and air intelligence/information sharing throughout the communities of interest, and ensure rapid and effective dissemination of intelligence to provide decision advantage to leadership and deepen understanding at all levels / departments of government;
- Enable IC members to quickly eliminate critical gaps and enhance enterprise agility; and
- Assess the process and make policy adjustments if necessary to ensure achievement of goals and objectives.

The Global Maritime Community of Interest (GMCOI) has begun to take form, as evidenced by the ODNI's stand-up of the new National Maritime Intelligence Center (NMIC), and by increased cooperation and engagement with the maritime industry, our Commonwealth Allies and foreign partners. However, Global Air Domain Community of Interest (GADCOI) intelligence integration activities are not at the same level of maturity as those of the maritime domain. Challenges remain in both communities to overcome cultural and institutional resistance, and we must stay the course and accelerate transformative efforts to realize meaningful reform. IC observations and recommendations for potential improvements include:

- Reestablish urgency to proactively transform the enterprises to defeat an agile enemy.
- Reaffirm information sharing as a top priority to quickly advance the closing of institutional gaps and seams through increased opportunity for authorized discovery of information.
- Exercise Intelligence Reform and Terrorism Prevention Act (IRTPA) authorities through advisory tasking to further engage the Interagency to improve government-wide collaboration and unity of effort.
- Recommit to the tenets of IRTPA's Information Sharing Environment.
- Stress the primacy of improved enterprise architecture and data standards.
- Use the Maritime Domain Awareness (MDA) Interagency Solutions Analysis (IASA) Plan as an integrated update to the MDA Interagency Investment Strategy (IAIS).
- Develop an Interagency human intelligence cadre for maritime and air intelligence.
- Develop Interagency maritime and air intelligence analyst training and education to improve focused analysis resulting in responsive and incisive understanding.
- Create a formal mechanism for intelligence sharing amongst the GMCOI, GADCOI and the National Intelligence Council's (NIC) Committee on Foreign Investment in the U.S. (CFIUS) Support Group.
- Exercise the ODNI NMIC to determine metrics on gap closures and its ability to support the Maritime Operational Threat Response (MOTR) Plan.
- Develop a governance structure for Air Domain Awareness (ADA).
- Advance the requirement for an air domain integrated capability analogue to the NMIC.

Threats that terrorists and other illicit actors pose to the nation's ports, waterways and airways remain persistent and grave, leaving no room for error or delay in this effort. We must proactively leverage our partnerships to ferret out threats and address them before an attack or other disruption effort is launched on the U.S., our Allies, or our interests abroad. Only through an inclusive, collaborative approach can we gain the critical information that lies outside of traditional intelligence collection that will create responsive and incisive understanding leading to preventative measures and threat interdiction. ODNI has provided the national level Interagency leadership and guidance necessary to synchronize this effort.

Maritime and Air Domain Economic Vulnerability

The world's economic engine has evolved into a finely tuned "just-in-time" delivery process not just for finished goods, but also for intermediate materials and parts needed during assembly of final products. It is no longer efficient or economical for businesses to invest in on-hand inventories of goods and materials due to the vastly increased efficiency and dependability of the modern intermodal Global Supply Chain (GSC). However, these advances in shipping technology and reliability have also resulted in economic vulnerability borne of a lack of resiliency to any long-term disruption of supplies and goods, to include oil and natural gas. Analysis from a 2006 Booz Allen Hamilton study indicated that the magnitude of economic impact increased significantly with the length of the disruption, but that regardless of the time period involved, the impact lasted approximately 3 years for all of the economies under review, therefore the longer the period of port(s) closure, the greater the impact on the U.S. and global economy.[1] Recent historical examples of this susceptibility include the $130 billion to $180 billion loss from port disruptions resulting from Hurricane Katrina[2], clearly demonstrating that any interruption or slow down in the GSC, at any node globally, causes initial large and expensive ripples throughout the entire network before a protracted recovery ensues. With massive intermodal global hubs or "gateways" now located on every continent, any obstruction thereof (single or multiple) can affect trade worldwide. Shutting down just the maritime shipping component of the GSC (e.g., by denying the safe use of ports for a prolonged period) could bring the global economy to its knees given its current economic fragility.[3,4] This makes the dynamics of intermodal[5] freight shipment a major security challenge.

Maritime Complexities. The maritime domain is the life blood of the global economy handling approximately 90% of the world's trade[6] and over 10.3 million U.S. seafaring passengers annually.[7]

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[1] "U.S. macroeconomic results for each of the three alternatives were noticeably negative. The results under the 15-, 30-, and 60- "days equivalent" indicated that the relationship between the net impact and the event duration was nonlinear….the damage to the economy in the 30-day equivalent scenario was more than twice the damage incurred in the 15-day equivalent disruption. In turn, the 60-day equivalent disruption reduced economic welfare by more than twice the 30-day scenario. The damage intensified over the second 30 days. Assuming a forecast of 3.0 percent growth in Gross Domestic Product (GDP) for 2007[1], the 3.0 percent fall of GDP for the 60-day scenario would imply a major recession for the U.S. economy with potential global impacts. The simulations indicated that the size of the U.S. economy in 2006 dollar GDP terms, and over the three years, would be reduced by approximately US$82 billion for the 15-day disruption and nearly US$500 billion for the 60-day scenario. Compared to past natural disasters and short-term, man-made events, an economic event of this magnitude would be unprecedented in U.S. economic history." *A Study of the Impact of Trade Disruption on Asia/APEC Economies Due to a Closure of U.S. Ports*. Booz Allen Hamilton. 7 December 2006. (pp ES-1 – ES-4).

[2] Werling, Jeff. *Interindustry Forecasting at the University of Maryland (Inforum) Report-The Impact of Port Disruptions on the U.S. Economy.* Department of Economics, University of Maryland. 2007. (http://www.inforum.umd.edu).

[3] "…disruption of global supply chains could create billions (or even trillions) of dollars in economic losses worldwide*…" Safe at Home: A National Security Strategy to Protect the American Homeland, the Real Central Front*. Center for American Progress. February 2008. (pp 19, 49).

[4] "For all its magnificent efficiency our global supply chain is extremely fragile and not constructed to easily withstand the disruption potentially brought about by a catastrophic event such as a terrorist attack." *Chain of Perils: Hardening the Global Supply Chain and Strengthening America's Resilience*. The Reform Institute, Alexandria, VA. 6 March, 2008. (p 3).

[5] "Intermodal" (also termed "transmodal") is widely defined as cargo transport involving the movement of a container or vehicle between multiple modes of transportation (truck, rail, ship, and airplane), without any handling of the freight contained within.

[6] The Roundtable of International Shipping Associations. (http://www.marisec.org/shippingfacts/keyfacts/?SID=f487831240868fc3205b3dde567694f8). Accessed May 20, 2009.

[7] U.S. Dept. of Transportation, Maritime Administration (MARAD). *U.S. Water Transportation Statistical Snapshot*. May 2009.

World-wide maritime activity includes more than 30,000 ocean-going ships of 10,000 gross tons or greater, most of which are underway at any given time. They are operated by over 150 different national flags, with increasing foreign ownership of shipping and U.S. ports. In 2008 alone, 7,119 oceangoing-vessels made 60,578 calls at 125 major U.S. ports with vessel calls up 7 percent from just 5 years earlier.[8] Many carry intermodal shipping containers,[9] resulting in more than 500 million container lifts each year. Their worldwide conveyor belt-like movement facilitates the seaborne portion of the GSC that transports over 1.3 billion metric tons of container cargo annually.[10] Over 16 million of these containers enter the U.S. each year destined for transshipment throughout America via railroad or truck.[11] Over the last five years U.S. port calls by large (5,000+ Twenty-foot Equivalent Unit - TEU) containerships increased by 278 percent; the number of these ships deployed in U.S. trades increased by 205 percent; calls per vessel increased by 24 percent; and U.S. foreign container trades increased by 67 percent.[12] Based on these trends, containerized maritime trade will likely continue to increase at 3% growth of Gross Domestic Product (GDP) following economic recovery. Notably, this activity does not include the innumerous break-bulk cargo ships and vessels below 10,000 tons.

Air Complexities. There are over 43,000 fixed airfields worldwide with over 300,000 active aircraft, making the air domain a dense, complex operating environment with attendant reduced reaction time to potential airborne threats. Any severe disruption would have potentially significant economic impact on economies that are dependent upon air transportation for the movement of people and short-term delivery of goods and freight. As demonstrated by the 9/11 terrorist attacks, incidents within U.S. airspace or the targeting of U.S. commercial carriers have an immediate impact on the aviation sector, an economic vulnerability that still exists today. According to the Federal Aviation Administration (FAA), during 2006, approximately 717 million domestic and international passengers relied upon air travel in the U.S. alone. During this time, the aviation industry generated $1.2 trillion in economic activity and contributed 11 million aviation-related jobs, representing 5.6% of the U.S. GDP.[13] The U.S. Air Transportation System (ATS) is comprised of a broad spectrum of public and private entities, which includes roughly 50,000 flights per 24 hour period and encompasses over 19,800 airports. With the increased growth and reliance on passenger air travel and air cargo transportation, air traffic in the U.S. is projected to increase two-to-three fold by 2025.[14] Any significant hostile activity targeting the ATS would result in severe economic consequences. The potential cost of just a single terrorist attack against the ATS has been estimated to be as much as $425 billion.[15]

Terrorist Threat to Economic Stability. The economy's inherent lack of resiliency to a major GSC or oil shipment(s) disruption event presents a substantial opportunity for those who seek to attack our institutions asymmetrically. Furthermore, our vulnerability has been dramatically amplified

[8] MARAD. *U.S. Water Transportation Statistical Snapshot*. May 2009.
[9] Containerization describes a system of intermodal freight shipment that uses standard International Organization for Standardization (ISO) containers (better known as shipping containers, ITUs (Intermodal Transport Units or isotainers)) that can be sealed and loaded intact onto container ships, railroad cars, planes, and trucks.
[10] Clarkson Research Services, Limited. *Shipping Review and Outlook.* (http://www.crsl.com/). Accessed May 20, 2009.
[11] MARAD. *U.S. Waterborne Foreign Container Trade by Trading Partner*. (http://www/marad.dot.gov/data_statistics). Accessed May 20, 2009.
[12] MARAD. *U.S. Water Transportation Statistical Snapshot.* May 2009.
[13] Federal Aviation Administration. *The Economic Impact of Civil Aviation on the U.S. Economy*. October, 2008.
[14] Joint Project Development Office. (http://www.jpdo.gov/index.asp). Accessed May 20, 2009.
[15] Society for Risk Analysis. *Economic Impacts of a Terrorist Attack on the U.S. Commercial Aviation System Study*. November, 2007.

with the onset of the global economic downturn which has left our financial institutions in a delicate state. This economic fragility has increased the risk of terrorists seeking to destroy, or render useless, intermodal infrastructure through the use of conventional, Weapons of Mass Destruction (WMD)[16] or cyber attack.[17] One potential scenario would include an attack on one or more maritime ports using a WMD or a Radiological Dispersal Device (RDD).[18] The stringent precautions required (and most likely demanded[19]) to prevent another such attack would bring global trade to a halt threatening the world with economic collapse and attendant trans-continental political instability.[20] Those circumstances could be brought about by the use of the GSC as a means of weapons delivery, or a direct attack on its intermodal jugular points, e.g., by either a kinetic or cyber attack. It is instructive to note that when West Coast ports (including the Port of Long Beach) were shut down for just 10 days due to a contract dispute in 2002, it resulted in a loss to the U.S. economy of between $10 and $20 billion.[21] Our enemies' ultimate goal would be to create a "tipping point" that results in a cascade effect toward economic chaos and political destabilization on a global scale.

This assessment is supported by the fact that al Qaeda remains determined to continue attacks on the West, particularly the U.S., with WMD if possible.[22] The terrorist group already viewed the destruction of the U.S. economy as paramount, even before the current financial crisis. This makes the disabling of our means of trade an attractive goal, leading to the widely-held conclusion that "al-Qaeda's focus on economic targets will likely sharpen under the current economic conditions."[23] Further validation comes from the Commission on the Prevention of WMD Proliferation and Terrorism which reported in December 2008 that "unless the world community acts decisively and with great urgency, it is more likely than not that a weapon of mass destruction will be used in a terrorist attack somewhere in the world by the end of 2013."[24]

Global Maritime and Air Intelligence Integration

The air attacks of September 11, 2001 against the United States and the November 28, 2008 seaborne attacks on Mumbai, India continue to demonstrate terrorist operational agility and propen-

[16] A WMD is defined as a weapon that can kill large numbers of humans and/or cause great damage over a large area. The term is often used to cover several weapon types, including chemical, biological, radiological, nuclear and high explosives (CBRNE).

[17] "al-Qaeda continues to pursue plans for Homeland attacks and is likely focusing on prominent political, economic, and infrastructure targets designed to produce mass casualties, visually dramatic destruction, significant economic aftershocks, and/or fear among the population." *Statement for the Record by Dennis C. Blair, Director of National Intelligence – Annual Threat Assessment Hearing, House Permanent Select Committee on Intelligence*. February 25, 2009.

[18] An RDD is a weapon which combines radioactive material with conventional explosives. It is more commonly known as a "Dirty Bomb."

[19] "…an act of catastrophic terrorism inevitably generates a wider and more enduring sense of vulnerability…mayors and everyday citizens of port cities will ask themselves, "If it could happen to Boston and Long Beach, why couldn't it happen to us?" Flynn, Stephen, *The Edge of Disaster*. Random House, New York. 2007. (pp 19-21, 36).

[20] According to one report, former Transportation Secretary Norman Mineta confirmed that he would have shut down all seaports in the event of an attack on any U.S. port until he could confirm to the President that all containers were safe. Larsen, Randall J., Colonel, USAF (Ret.), *Our Own Worst Enemy.* (p 208).

[21] Harris, Thomas E. *Applied Organizational Communication*, 3rd Edition. 2007. (p 89).

[22] "Al-Qa'ida is the terrorist group that historically has sought the broadest range of CBRN attack capabilities, and we assess that it would use any CBRN capability it acquires in an anti-US attack, preferably against the Homeland." *Statement for the Record by Dennis C. Blair, Director of National Intelligence - Annual Threat Assessment Hearing, House Permanent Select Committee on Intelligence.* February 25, 2009. (p 21).

[23] Barrett, Richard. *The Economic Crisis: Al-Qaeda's Response.* The Washington Institute for Near East Policy; PolicyWatch #1485. March 9, 2009.

[24] *World At Risk: The Report of the Commission on the Prevention of WMD Proliferation and Terrorism*. December 2008. (p xv).

sity for adaptation. Al Qaeda is known to plan toward a goal of increasing destruction where each major attack eclipses the previous in lethality and devastation. The implication is that al Qaeda, or a like-minded terrorist group, will attempt to employ WMD as soon as practicable by asymmetric means that will very likely include the use or targeting of the transportation sector or its GSC intermodal conveyances.

Global Maritime and Air Intelligence Integration (GMAII) is an outcome of the 9/11 Commission's efforts to seek an integrated Intelligence Community (IC) able to "connect the dots" in advance to prevent a catastrophic terrorist attack on the U.S. or its interests worldwide.[25] In response to this threat, the initial mission of Global Maritime Intelligence Integration (GMII) was established at the Office of the Director of National Intelligence (ODNI) in October, 2006. The action was a direct result of recommendations from the 9/11 Commission[26], requirements from the Intelligence Reform and Terrorism Prevention Act (IRTPA), and direction from the National Strategy for Maritime Security (NSMS) and its supporting GMII Plan.[27] The main objective is to ensure maritime security intelligence policy development, coordination and implementation to improve information access and intelligence integration across an envisioned Global Maritime Community of Interest (GMCOI). Following the promulgation of the National Strategy for Aviation Security (NSAS), the GMII staff was further tasked in February 2007 with air intelligence integration for the IC. This led to the formation of the GMAII staff within ODNI to holistically tackle maritime, air and other related domain collaboration challenges. The end-state goal is the development of mission-focused cross-domain intelligence enterprises to prevent a terrorist attack against the U.S. and its interests abroad while deterring and defeating an agile enemy, and in so doing, anticipate and head off threats to global commerce that could destabilize our nation's economy.

The mission of the Assistant Deputy Director of National Intelligence for Global Maritime and Air Intelligence Integration (ADDNI/GMAII) is to enable U.S. Government (USG) entities to anticipate and prevent catastrophic attack (from maritime, air and other intermodal domains) on the Homeland, U.S. persons, and our interests worldwide. This is being accomplished through intelligence policy development and facilitation of coordination and collaboration that is forging an integrated maritime and air intelligence capability across the related communities of interest in support of the NSMS and NSAS. These strategies recognize the full spectrum of 21st Century threats and the immediate requirement for persistent domain and cross-domain awareness. They also identify organizational integration and information sharing as critical factors to maximize such awareness to support layered security measures. Each strategy has supporting plans, two of which are executed by the ADDNI/GMAII on behalf of the ODNI: Global Maritime Intelligence Integration and Air Domain Surveillance and Intelligence Integration (ADSII). Both plans require the leveraging of existing capabilities to expeditiously integrate all available intelligence regarding potential threats. They also stress the need for close coordination between the USG, public, private and foreign partners to facilitate a shared situational awareness while promoting a seamless intelligence enterprise architecture. The main focus of these plans is security—countering bad actors whose intent is either to cause grievous harm in, or move illicit cargoes through, the maritime and air domains (e.g., terrorists, WMD proliferators, transnational criminals, pirates, etc.).

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[25] National Commission on Terrorist Acts Upon the United States. *9/11 Commission Report.* July, 2004. (p 408).
[26] "The 9/11 Commission identified ten lost "operational opportunities" to derail the 9/11 attacks—and most involved a failure to share information." The Markle Foundation Task Force on National Security in the Information Age. *Nation at Risk: Policy Makers Need Better Information to Protect the Country*. March 2009. (p 3).
[27] Global Maritime Intelligence Integration Plan. October 2005. (Section II; p 4).

Intelligence Community Directive (ICD) 902, Global Maritime and Air Intelligence Integration, effective January 14, 2009, (see Annex A) codified the roles and responsibilities of the ODNI and IC in the execution of the related national plans. Implementation of this directive will ensure that leadership at all levels and echelons are rapidly provided decision advantage and support through actionable intelligence so they can make timely, well-informed choices to counter national security threats in minimal time and allow for threat resolution at a maximum distance from the U.S., our Allies and foreign partners. The ODNI is advancing this goal through integrated mission management, and by collaboratively leveraging legacy intelligence capabilities while developing new policies, operational relationships and initiatives. The activity also provides leadership and vision for building the GMCOI and Global Air Domain Community of Interest (GADCOI) for all-source intelligence integration; develops the construct and architecture to support unencumbered inter-departmental information sharing; ensures effective intelligence dissemination; and then assesses the process to achieve the fastest possible end-state of complete integration, synchronization and alignment of maritime, air and other intermodal intelligence resources.

The key to successfully achieving persistent domain and cross-domain awareness goals, and efficiently defeat adversaries, is to improve all-source analysis focused on illicit trafficking networks to effectively narrow the search to a specific vessel, aircraft, container and/or person that represents a threat. Our adversaries take advantage of the relative anonymity of the global commercial environment to accomplish their objectives. Each conveyance carrying humans and/or cargo is vulnerable to this threat, yet tracking all conveyances and cargo alone will not provide insight into the potential for hazard. Understanding the networks of human beings behind the cargo and conveyance is a valid means and more resource efficient method of ascertaining the threat. Actions taken by the IC since 9/11 demonstrate that information on illicit and other criminal activity in the global transportation network affords critical insights into the intentions of those who would do us tremendous harm. Examining smuggling networks, front companies, and "gray" actors and transactions have resulted in successful interdictions of people and cargo who clearly pose national security threats. Notably, much of the data necessary for this intelligence production resides outside the traditional IC, existing within law enforcement, regulatory, private sector and foreign organizations in the global communities of interest.

There is a growing consensus that urgency has waned since 9/11, and we are still not able to rapidly "connect the dots."[28] It is therefore imperative that we accelerate efforts to create a globally networked and unified intelligence enterprise steadily focused on maritime, air and intermodal mission-sets, with the means to integrate and leverage federal, state, tribal, local, private and foreign entities to support the common goal of shared attentiveness to potential threats. Persistent domain and cross-domain awareness grants time and distance to detect, deter, interdict and defeat such threats. Only through an inclusive, collaborative approach can we gain the critical information that lies outside of traditional intelligence collection that will create the incisive understanding and decision advantage necessary for anticipatory and proactive measures.

Strategic Objectives

The ODNI holistically examined Maritime and Air Domain Awareness requirements, and the transformational intelligence integration needed to support it. The result was the identification of key strategic objectives essential to realizing the collaborative and integrated vision implicit in

[28] The Markle Foundation Task Force on National Security in the Information Age. *Nation at Risk: Policy Makers Need Better Information to Protect the Country*. March 2009. (pp 1, 4)

the related national strategies and plans. ODNI remains committed to expediting horizontal intelligence integration supported by the implementation of data sharing standards that are breaking down barriers to information sharing, thereby facilitating rapid decision support. Associated endeavors include the development of new policies to ensure clear national-level guidance, advocacy for incentivized organizational change, resource realignment when necessary to achieve optimal efficiency, and customer inclusion in national intelligence resource prioritization. Through organizational collaboration and enterprise transformation, ODNI is refining the IC's focus in the maritime, air and intermodal venues, increasing its ability to efficiently meet national security goals (see Appendix C for specific accomplishments). The following strategic objectives guide that effort:

- *Provide leadership for maritime, air, and ultimately, transportation domain intelligence integration.* Visionary national-level IC and Interagency leadership, based on a premise of aggressive collaboration and information sharing, is an essential element of the GMAII initiative. The fundamental aim is to unleash the full potential of the IC by ensuring that it is horizontally integrated, has the necessary resources combined with a climate of transformation, and encourages creativity and daring based on clear direction as to where we must go and how we must get there to achieve mission success in defense of the nation.
- *Develop the construct and architecture to support information sharing.* Developing the capability and architecture to support rapid information sharing is the first step of the transformation process. ODNI is helping primary stakeholders to validate essential roles and responsibilities necessary to carry out operational and analytical requirements, and to identify the resources needed to create and sustain robust capabilities that are not available within current operating baseline resources and capabilities. The ODNI will continue to advocate IC stakeholder resource requirements through IC budget processes.
- *Build global communities of interest for all-source intelligence integration in the maritime, air and transportation domains to develop familiarity, leverage partnerships and facilitate concerted teamwork that is marshaled against the challenge*. The Community of Interest (COI) concept is the backbone of intelligence integration and collaboration.[29] Contributors must be identified, both within the IC as well as the linkages that IC members have, or need to develop, with other COI resources external to the IC. Although it may appear to be relatively simple, identifying the myriad of stakeholders within a COI is a challenging endeavor because of varied interconnectivity that includes both obvious and oblique members and potential contributors. This ambitious undertaking was begun in concert with the ODNI's 500 Day Plan and adjusted to meet the goals of the follow-on Vision 2015 as well as the August 2009 National Intelligence Strategy to create unified enterprises. The effort involves initial and follow-up identification of both IC and non-IC stakeholders for both the Global Maritime and Global Air Communities of Interest.[30]
- *Integrate maritime and air intelligence / information sharing throughout the communities of interest, and ensure rapid and effective dissemination of intelligence to provide decision advantage to leadership and deepen understanding at all levels and departments of government.* Information sharing is the foundation of the NSMS and the GMII Plan (seen Annex C), as well as the NSAS and its accompanying ADSII Plan (see Annex D). The GMII plan specifically tasked ODNI to ensure effective government-wide access to maritime informa-

[29] The Communities of Interest concept is an outgrowth of the Information Sharing Environment (ISE) created by Congress in IRTPA. The communities are intended to facilitate collaborative work on common problems by crossing boundaries between federal, state, tribal and local governments, as well as the private sector and our foreign partners.

[30] "We need unity at all levels – nationally, locally, and among people all across the globe." *World At Risk: The Report of the Commission on the Prevention of WMD Proliferation and Terrorism*. December 2008. (p xiii).

tion and data critical to intelligence production; identify and disseminate maritime domain specific standards for information access in the IC's shared information environment; and to identify and include new or existing information sources in the IC's shared information environment.[31] The ADSII Plan directs close coordination across all levels of the USG to better integrate intelligence, all-source information and aviation surveillance data to facilitate a shared situational awareness, relying on the incorporation of computer-assisted anomaly detection to assist human analytic efforts. It further calls on the ODNI to ensure that the IC remains agile and able to surge when threats materialize.[32]

- *Enable IC members to quickly eliminate critical gaps and enhance enterprise agility.* The process to transform the IC to better integrate maritime, air and intermodal intelligence is a work in progress, during which critical gaps have been identified that cannot wait for organizational transformation or systemic improvement, else wise putting the nation at greater risk.[33] In those specific cases, the ODNI works to ensure that issues identified as critical are addressed without delay to facilitate enhanced decision support to senior decision-makers.
- *Assess the process and make policy adjustments if necessary to ensure achievement of goals and objectives.* The ODNI will continue to guide and advance intelligence integration and collaboration for all maritime and air domain stakeholders. This includes reviewing resources, capabilities and capacities, and authorization/directives, along with the identification of gaps and overlaps in authorization, appropriation and policy, and mission execution. All efforts will be monitored, measured and weighed in determining the appropriate way ahead for stakeholders.

Status of the Communities

The Information Sharing Environment (ISE) initiative resulting from IRTPA intended a "virtual reorganization of government" through communities of interest working on common problems across agency boundaries and between federal, state and local governments and the private sector—wherever important information could be found.[34] Likewise, the NSMS and the NSAS identified organizational integration and information sharing as critical factors necessary for maximizing domain awareness to prevent catastrophic attack on the Homeland. Their derivative plans directed baseline studies that were conducted by the ODNI and the Department of Homeland Security (DHS), the findings of which indicated that maritime and air domain intelligence enterprises were a loose federation of departments, agencies and organizations.[35] Analytic and supporting collection processes required greater agility, connectivity and unity of effort, to be further improved by analysis driving collection resources and their application. Immediate action was required to achieve the necessary level of collaboration across the full spectrum of not just the IC, but all echelons of government. The effort also needed to be extended to private sector and foreign partners if attainment of persistent shared awareness by all parties was to be fully achieved. Only this level of collaborative engagement would ensure the rapid transfer of accurate and relevant information necessary to anticipate and proactively defeat threats to the Homeland. These findings led to ODNI efforts to

[31] GMII Plan. October, 2005. (pp 4, 8).
[32] ADSII Plan. March, 2007. (pp 1, 6).
[33] "Today, we are still vulnerable to attack because—as on 9/11—we are still not able to connect the dots." The Markle Foundation Task Force on National Security in the Information Age. *Nation at Risk, Policy Makers Need Better Information to Protect the Country.* March 2009. Executive Summary.
[34] The Markle Foundation Task Force on National Security in the Information Age. *Nation at Risk: Policy Makers Need Better Information to Protect the Country*. March 2009. (p 4).
[35] McMunn Associates. *Initial Baseline Assessment of the State of the Global Maritime Community of Interest*. August 2007. (p 2).

develop both a GMCOI and a GADCOI, comprising all aforementioned entities, working in unison toward a common defensive goal.

Global Maritime Community of Interest. The GMCOI has begun to take form, evidenced by increased cooperation and engagement from the maritime industry, Commonwealth Allies and other foreign partners. Further, continued collaboration between ODNI, the Office of Global Maritime Situational Awareness (OGMSA)[36] and the U.S. Department of Transportation's (DOT) Maritime Administration (MARAD)[37] is fostering increased cooperation from other Interagency stakeholders, increasing the momentum of alignment and synchronization of mission sets and information sharing architecture. Notably, the foundational piece of this associative effort was established with the recent stand-up of the ODNI's new National Maritime Intelligence Center (NMIC).[38] When fully operational, it will become the nexus for IC, Interagency, private sector, and international maritime collaboration and unity of effort. One goal of the ODNI NMIC will be to ensure the establishment and maintenance of a maritime Common Intelligence Picture (CIP) of the global maritime domain to support Maritime Operational Threat Response (MOTR) activities in defense of the Homeland and U.S. interests abroad.

Global Air Domain Community of Interest. Air domain intelligence integration activities toward development of a formalized national-level structure are not at the same level of maturity as those of the maritime domain. Much of the data needed for holistic air intelligence analysis still resides in dissimilar information systems throughout multiple agencies, as well as within non-intelligence entities such as law enforcement, regulatory, private sector and foreign organizations. Sustained national-level Interagency leadership is required to successfully guide and shape the collaboration and synchronization of air intelligence and surveillance data necessary to create shared situational awareness as mandated by the NSAS and its subordinate plans. Further Interagency integration is needed to proactively detect, deter, prevent and defeat threats emanating from the global air domain.

What We Have Achieved

The vision, leadership and policy oversight provided by the ODNI guided the efforts of the IC and Interagency entities toward initial advancements in collaboration and integration of resources. ODNI worked to understand the issues impacting information sharing in the maritime and air domains by engaging primary stakeholders, gained insight into the IC's business practices, and then began to grow the maritime and air communities of interest.

Strategic Objective 1: *Provide leadership for maritime, air, and ultimately, transportation domain intelligence integration.*

All of the actions of the ODNI sprang from an imperative to enable the creation of decision advantage that prevents catastrophic attack from maritime, air and other intermodal domains, on the Homeland, U.S. persons and our interests worldwide. Since its inception, the ADDNI/GMAII staff

[36] OGMSA is an Interagency organization whose mission is to facilitate the creation of a collaborative and global maritime information sharing environment through unity of effort across entities with maritime interests. They are the operational surveillance complement to ADDNI/GMAII's maritime intelligence integration mission.

[37] MARAD's mission is to improve and strengthen the U.S. Marine Transportation System (MTS), including infrastructure, industry and labor, to meet the economic and security needs of the nation. It is also the lead agency for maritime matters within the Department of Transportation and was designated by Congress as the MTS Information Advocate to serve as the focal point for information management.

[38] The new ODNI NMIC was established within the preexisting National Maritime Intelligence Center facility that also houses the Office of Naval Intelligence (ONI) and the U.S. Coast Guard's Intelligence Coordination Center (ICC).

led the way to forge collaborative and integrative efforts throughout the IC and Interagency. These efforts began through actions taken as the Director of National Intelligence's (DNI) representative to the National Security Council/Homeland Security Council's (NSC/HSC) Maritime Security Interagency Policy Committee (MSIPC)[39] and Trans-Border Security Interagency Policy Committee (TBS IPC)[40], where the ODNI influenced national-level policy development and decisions for the advancement of the GMCOI and GADCOI.

Further, both the GMII and ADSII plans task the ODNI to provide leadership and direction for information sharing within the maritime and air domains. The ODNI responded to this charge through service on governance boards, working with private sector, state and local partners, and by developing partnerships with key IC and non-IC stakeholders.

Maritime:

As a result of the Initial Baseline Assessment of the State of the Global Maritime Community of Interest,[41] the ODNI directed the establishment of a cooperative effort with OGMSA, (an Interagency organization) to facilitate the creation of a collaborative global, maritime, information sharing environment, focused on operational surveillance.[42] The initial joint effort was the rapid establishment of the Maritime Domain Awareness (MDA) Stakeholders Board (SHB) to align and integrate GMCOI efforts to achieve MDA objectives. Its authority and responsibilities were derived from an agreement between its co-Chairs, the Assistant Deputy Director for National Intelligence for Global Maritime and Air Intelligence Integration (ADDNI/GMAII) – the Director of National Intelligence's (DNI) current designee – and the Director, Global Maritime Situational Awareness (D/GMSA), as a means to implement recommendations of the National Concept of Operations for MDA (MDA CONOPS) and other initiatives which fall under the National Plan to Achieve MDA.[43] Through its Executive Steering Committee (ESC), the MDA SHB provided the MSIPC with final recommendations to update strategic-level guidance and revise policy as appropriate. Initiatives such as the Information, Cargo and Architecture Enterprise Hubs, Information Sharing governance and Intelligence Collection Architecture (ICA) proposals are reviewed by the MDA SHB's Interagency Requirements Working Group (IRWG) whose results are used for policy development. The ODNI routinely engages MARAD through its membership on the MDA SHB, leveraging its role as a non-IC maritime information advocate to foster information sharing and partnerships among all levels of government, the maritime commercial industry, academia, non-governmental organizations and foreign governments. Results of this collaboration include a closer working relationship between the IC and the maritime industry, ensuring that commercial entities have a strong voice in IC policy development thereby increasing public trust.

The ODNI was the leading advocate and champion of the start-up of a national center devoted to the integration of maritime intelligence. While successfully advancing the concept's estab-

[39] Formerly named the Maritime Security Policy Coordinating Committee (MSPCC).
[40] Formerly named the Border Transportation Security Policy Coordinating Committee (BTS PCC).
[41] See Appendix C: "*Completion of a Maritime Baseline Study."* (p C-12).
[42] Although surveillance and intelligence are mutually interdependent, it is instructive to note the differences. *Surveillance* is focused on detecting, tracking, and identifying objects in order to manage, secure, and protect domains, while *Intelligence* is focused on understanding current and emerging threats to provide insight on the capabilities and intent of hostile elements that intend to use domains to harm U.S. interests. Intelligence also provides tipper information for the efficient and effective employment of operational surveillance assets.
[43] The National Plan to Achieve MDA lays the foundation for an effective understanding of anything associated with the maritime domain that could impact the security, safety, economy, or environment of the U.S. and for identifying threats as early and as distant from our shores as possible.

lishment to IC and Interagency leadership, the ODNI addressed the tasks of maritime intelligence integration by developing the NMIC Steering Committee, specifically to begin to improve collaboration between the Office of Naval Intelligence (ONI) and U.S. Coast Guard Intelligence Coordination Center (ICC).[44] The ODNI also stood up the NMIC Interagency Working Group (NIAWG) to begin specific concept development of a national center in May 2008. The more inclusive NIAWG increased collaboration by ensuring representation of a cross-section of the IC and Interagency to broaden perspective and widen participation.[45] Further, eight positions were transferred from ODNI management control to the NMIC after the latter's stand-up to shift the mission management aspect of maritime intelligence integration to the new functional entity.

An early ODNI effort was a Ship Tracking Senior Advisory Group (SAG) whose collective knowledge was used to ensure effective integration, alignment and coordination of maritime intelligence collection and processing. The SAG's membership included the ADDNI/GMAII, U.S. Coast Guard's Directorate for Intelligence & Criminal Investigations (CG-2), National Reconnaissance Office (NRO), ONI, and Deputy Assistant Secretary of the Navy (DASN) for Command, Control, Communications, Computers and Intelligence (C4I) and Space. The collaborative effort yielded improved and increased automated ship tracks, and a hybrid tracker developed by leveraging the best of National Security Agency (NSA) and Naval Research Laboratory (NRL) capabilities. A major goal of this endeavor was achieved in April 2009 at a planning meeting for Joint Worldwide Ship Tracking and Dissemination. Agreement was reached on a method for generating true worldwide all-source ship tracks and disseminating them to U.S. Coast Guard and Navy customers on the Integrated Broadcast System Service network in a format that can be readily absorbed in current operational track display and management systems. This consensus was enabled by a commitment between key IC and non-IC track production agencies to form a partnership for a new integrated capability which will be called the National All-Source Fusion Ship Tracking Service.

Air:

Following the addition of air intelligence integration to ODNI's mission, it established an Air Intelligence Integration Senior Steering Group (AII-SSG) comprised of senior executives from across the IC and Interagency[46] to represent air domain intelligence stakeholders' equities and responsibilities in support of information sharing and intelligence integration. The group oversees IC efforts to identify and analyze threats to the global air domain, integrate the GADCOI, promote a seamless intelligence enterprise architecture, and inform the DNI regarding execution of ODNI responsibilities under the NSAS. Significant issues undertaken by the AII-SSG include the identification and description of the "To Be" critical elements of an integrated air intelligence capability and authorization of an extensive baseline assessment to identify the "As Is" state of the GADCOI, emphasizing integrated collection and analysis processes. The AII-SSG concept was so successful, that it led to the incorporation of maritime equities to form a combined air and maritime SSG de-

[44] The NMIC Steering Committee was comprised of ADDNI/GMAII, ONI and ICC personnel.
[45] IC and Interagency representation on the NIAWG includes the ADDNI/GMAII, U.S. Navy's Office of Naval Intelligence and Naval Criminal Investigative Service, U. S. Coast Guard's Intelligence Coordination Center, Central Intelligence Agency, National Counter-Terrorism Center, National Counter-Proliferation Center, National Geospatial-Intelligence Agency, National Security Agency, Federal Bureau of Investigation, Department of Homeland Security, Department of the Treasury and the Department of Transportation's Maritime Administration.
[46] IC and Interagency representation on the AII-SSG includes the ADDNI/GMAII, Department of Homeland Security's Office of Intelligence & Analysis, Department of Defense (Undersecretary of Defense for Intelligence and Joint Staff J2) and the Federal Bureau of Investigation's National Security Branch.

signed to steer intelligence integration within the separate domains while facilitating cross-domain compatibility and integration.

Ensuring IC input to Joint Planning and Development Office (JPDO)[47] activities, the ODNI coordinated with JPDO staff and the FAA to enable the first-ever IC representation in the JPDO Interagency governance structure. The ODNI participates in the JPDO Executive Board and the department-level Senior Policy Committee (SPC) oversight body to ensure representation of IC equities and capabilities in the planning and implementation of the JPDO-lead activities in support of the Next Generation (NextGen) ATS for the U.S. The ODNI provided IC collaborative support to: 1) facilitate IC integration into NextGen to improve Air Domain Awareness (ADA); and 2) advance associated collaborative Interagency efforts toward NextGen. The SPC will also assume interim governance responsibilities to oversee and coordinate efforts to integrate the Interagency air surveillance capabilities, pending the establishment of a permanent governance structure. As a direct result of this engagement, the Principal Deputy Director for National Intelligence (PDDNI) formally accepted Ex-Officio membership in the JPDO SPC governance structure to advance integration of IC equities and capabilities in NextGen planning and implementation efforts and to facilitate IC integration with surveillance for enhanced ADA. The ODNI also participated in the development and coordination of the JPDO Interagency Surveillance Study Team (ISST) report to advise Congress and the Executive Branch on air surveillance challenges and recommend Interagency collaborative efforts to plan and implement an integrated surveillance capability for the USG. The report concluded that an Interagency governance mechanism is needed to effectively integrate air surveillance requirements, planning and investment. The ISST report and follow-on Interagency Surveillance Summit directly resulted in the engagement of the SPC to serve as the interim governance body for air surveillance planning and implementation, and for the inclusion of ODNI.

Strategic Objective 2: *Develop the construct and architecture to support information sharing.*

Air and maritime domain specific standards and architectures, combined with effective information technology portfolio management processes, are necessary to implement the NSMS and NSAS and their subordinate plans in keeping with the IC's Information Sharing Strategy.[48] The importance of this was reflected in the air and maritime intelligence baseline assessments which identified many impediments to information sharing such as the lack of a national level MDA architecture or common technical/data standards within the GMCOI and GADCOI. The ODNI is collaborating closely with relevant Chief Information Officers across government, the private sector and

[47] The JPDO is responsible for managing a public/private partnership to bring the NexGen online by 2025. It is the central organization that coordinates the specialized efforts of the Departments of Defense, Homeland Security, Commerce, Transportation (FAA), National Aeronautics and Space Administration (NASA), and the White House Office of Science and Technology Policy. NexGen initiatives include active technologic capabilities that enable network updates with real-time shared information and tailored to the individual needs of all U.S. aircraft. NexGen's computerized air transportation network stresses adaptability by enabling aircraft to immediately adjust to ever-changing factors such as: weather, traffic congestion, aircraft position via the Global Positioning System (GPS), flight trajectory patterns, and security issues. By 2025, all aircraft and airports in U.S. airspace will be connected to NexGen and will continually share information in real time to improve efficiency, safety and to absorb the predicted increase in air transportation. JPDO. (http://www.jpdo.gov/index. asp). Accessed May 20, 2009.

[48] The U.S. Intelligence Community Information Sharing Strategy aims to improve our ability to anticipate and deter adversaries' ill intentions by improving all-source analysis and delivering timely, objective and actionable intelligence to senior decision makers, warfighters, and defenders of the Homeland. It challenges the status quo of a "need to know" culture and moves to a "responsibility to provide" mindset building on a "collaborative information environment" that anticipates mission needs for information, makes all intelligence information discoverable and ensures analyst and collector awareness of intelligence data. ICD 501, Discovery and Dissemination or Retrieval of Information within the Intelligence Community. January 21, 2009.

our foreign partners to develop the governance, technical standards and program guidance necessary to improve information sharing and intelligence production within the intermodal transportation domains.

The ODNI's mission, tasks and authorities for information sharing within the Maritime and Air Domains center on the efforts of the Program Manager – Information Sharing Environment (PM-ISE) to bring about horizontal integration and information sharing between the IC, defense, homeland security, law enforcement, state, local, tribal and private sectors. The ADDNI/GMAII's staff works in concert with the PM-ISE to ensure cross-domain uniformity of Functional Data Standards for Cargo and Conveyance across the maritime and air domains.

Maritime:

The ODNI concluded the initial phase of the GMCOI Intelligence Architecture effort in December 2008. It was a first step to providing enhanced understanding of current maritime intelligence capabilities, relationships, and information exchanges. The effort enhanced decision-makers' awareness of GMCOI activities while laying the foundation for future architectural work across the enterprise. The GMCOI Intelligence Architecture documented the current state of maritime intelligence, mapped it to the IC Enterprise Architecture Business Reference Model, and highlighted areas for deeper study. The project also included a detailed way-ahead plan documenting architecture best practices and the appropriate path to take in future efforts. Enterprise architectures are central to improved information sharing in the air and maritime domains. The ODNI has therefore focused its efforts on national level and component IC level architectures. Using common frameworks and accepted practices common to the federal government and the IC, the ODNI will also be able to merge common components for an anticipated integrated transportation domain architecture.

As policy co-Chair for the Interagency MDA Data Sharing Community of Interest (MDA DS COI), ADDNI/GMAII's Chief Technology Officer's (CTO) actions have included: 1) supporting the development of an enhanced maritime Common Operational Picture (COP) utilizing data feeds from the Automated Information System (AIS); 2) creating a Common Data Dictionary; 3) developing web-enabled sharing of a Single Integrated Look-Out (SILO) list of vessels of interest; and 4) improving access to international cargo information. The ODNI was also instrumental in developing the charter for and standing up the MDA Information Sharing Subcommittee (ISSC) which supports the MDA SHB and serves as the coordination body within the maritime domain for information sharing. The MDA ISSC is engaged with planning a proposed transition of the MDA DS COI, its Spiral III Legal Review, and the MDA Information Hub's role in identifying and promoting Functional Data Standards.

ADDNI/GMAII's CTO engaged the ODNI Chief Information Officer (CIO) and the IC's Information Sharing (ICIS) Data Standards Coordination Activity (DSCA) to develop Functional Data Standards for cargo and conveyance. Through reciprocal agreements, the DSCA coordinates and recommends standards to the IC's ISSC for use across the IC and Department of Defense (DoD). Additionally, the CTO presented a statement of need for the cargo and conveyance standard to the DSCA, which validated the requirement to develop functional standards for cargo and conveyance. The ODNI is also in the process of developing an initial set of domain specific standards and will assign Data Standard Manager responsibilities for both maritime and air intelligence standards to the appropriate organization.

At the national level, ODNI worked with the Office of the Department of the Navy Chief Information Officer (ODON CIO) and the OGMSA to develop the National MDA Architecture as described in the National MDA CONOPS. Concurrently, at the federal, state and local levels, ODNI has partnered with the Naval Postgraduate School's Maritime Defense and Security Program, and MARAD to establish a Maritime Information Sharing Taskforce (MIST). The MIST is working to improve bi-lateral sharing of maritime threat information between private sector shipping and government agencies.[49]

Air:

The ODNI is participating in the Network Enabled Operations (NEO) Spiral One Plus Phase A Planning and is also participating in developing Interagency requirements for a planning effort, led by the FAA and JPDO NextGen, to define NEO Spiral Two, which is one of several different solution platforms that will inform the development of a national-level enterprise architecture for the GADCOI. This effort includes stakeholders from across the federal government including DoD, DHS, FAA and other Interagency partners to assist with aviation security and air operation methodologies. Further, ODNI is assisting the Customs and Border Protection's (CBP) Air and Marine Operations Center (AMOC) with their Phase B Strategic Planning initiatives to plan for future AMOC developments in an Interagency environment. ODNI efforts led the way in determining the "To Be" state of the AMOC for an integrated national capability. The Phase B Strategic Planning endeavor engaged stakeholders across the federal government to assess customer interactions and information needs to guide the planning and investment strategy for AMOC expansion to better support national air security requirements.

Strategic Objective 3: *Build global communities of interest for all-source intelligence integration in the maritime and air domains to develop familiarity, leverage partnerships and facilitate concerted teamwork that is marshaled against the challenge.*

Establishing an effective global community of interest in each domain is the key to successful intelligence integration. Contributors must be identified, both within and external to the IC through linkages to capabilities and resources. Identifying the myriad stakeholders within the GMCOI and the GADCOI is an extremely challenging endeavor due to the countless interconnections that include both obvious and oblique members and potential contributors. It also includes identifying IC and non-IC stakeholders for the GMCOI and GADCOI in order to understand IC equities relative to maritime and air intelligence.

Maritime:

Efforts to build the GMCOI included outreach conferences sponsored by both the ONI and ODNI. ONI's GMII conferences brought the IC, Interagency and Commonwealth Allies together to focus on how to best identify, mitigate and defeat common threats and challenges in the maritime domain. They also highlighted ongoing initiatives to improve Interagency collaboration; identified analytic gaps within the GMCOI; and showcased emerging capabilities for conducting intelligence collection, analysis, integration and dissemination of maritime-related intelligence. A direct outcome of the March 2008 GMII conference was the requirement for a collaborative capability between U.S. and Commonwealth Allies. Recognizing the need for an immediate solution, ODNI, ONI and the Defense Intelligence Agency established an interim capability available to all Commonwealth Allies based on Microsoft SharePoint. This action provided them with the first-ever

[49] See Appendix C: *Maritime Information Sharing Taskforce (MIST)*. (p C-7).

ability to browse content posted for review and comment by U.S. personnel. The new capability established a bridge to a fully collaborative enterprise-wide solution being developed by the ODNI that will create direct inter-Commonwealth and U.S. analyst collaboration.

The ODNI conducted two preliminary GMCOI summits in 2007 that included IC stakeholders, Interagency, law enforcement and private sector representatives to establish an awareness of GMII across the fledgling community and to develop opportunities for collaboration and partnerships. These meetings also began an inclusive process of leveraging results of the Maritime Baseline Assessment into recommendations for changes to authorities, responsibilities, programs, etc., necessary to implement the GMII Plan. Most importantly, these gatherings provided direct stakeholder input to the drafting of ICD 902, Global Maritime and Air Intelligence Integration. ODNI built upon this foundation with two follow-on Protection of the Global Supply Chain conferences in October 2007 and June 2008 specifically designed to reach out to the maritime industry.[50] The first event leveraged industry experts to visualize a concept of the GSC in 2032 and to better understand how the USG can contribute to its security and reliability. The second solicited ideas on how to quickly achieve worldwide maritime suspicious incident and threat warning information sharing. This included a related overview of existing information exchange entities such as Information Sharing and Analysis Centers (ISACs) and the Department of State's Overseas Security Advisory Committee (OSAC) to determine the utility of each for threat reporting purposes.[51] See Appendix C for detailed conference results and actions taken.

An initial success of the new ODNI NMIC was its collaboration with the National Intelligence Council that resulted in a precedent setting conference on Piracy in the Horn of Africa held from 7-9 April 2009 in Suitland, MD. The conference drew more that 280 attendees, including naval and defense attachés from 20 countries, Interagency representatives from 21 organizations, operations and intelligence analysts from 25 military commands, academic experts from three universities, senior representatives from the maritime shipping industry, and a representative from the United Nation's World Food Program. Topics discussed included case studies; pirate tactics, techniques and procedures; and private sector, foreign partner and non-government organization requirements. The event further integrated the GMCOI by providing a forum for unparalleled sharing of information to identify and close counter-piracy gaps and seams.

Air:

Efforts to build the GADCOI are in the formative stages. The ODNI has supported planning and execution of two Interagency Surveillance Summits, gathering department and agency stakeholders to consider recommendations on initiatives to improve air surveillance integration. These efforts resulted in the identification of common data standards and architecture that will contribute to the integration of ADA intelligence and surveillance. Major outcomes included: 1) the enabling of stakeholder Principals to reach agreement on an Interagency air surveillance governance structure and way-ahead plan for implementation of actions to guide and facilitate integration of air sur-

[50] The DNI's Intelligence Science Board commissioned a study on *"Integrating Private Sector Information into Intelligence Community Activities"*, the results of which were delivered in November, 2008. A major finding was that private sector entities will only deal at the executive level of government in order to protect proprietary information based on engendered trust, confidence, responsiveness and a relationship valued by government.

[51] These events were part of a series of workshops initiated by the ODNI and two private sector partners: the U.S. Chamber of Commerce and the Intelligence and National Security Alliance (INSA) designed to solicit public feedback toward assessment and improvement of the IC's level of collaboration.

veillance capabilities; and 2) an invitation by the Secretary of Transportation to include the DNI in the governance structure to facilitate integration of surveillance with intelligence capabilities.[52]

Strategic Objective 4: *Integrate maritime and air intelligence/information sharing throughout the communities of interest, and ensure rapid and effective dissemination of intelligence to provide decision advantage to leadership and deepen understanding at all levels and departments of government.*

The ODNI achieved initial success in leveraging the authorities of the DNI to determine and accomplish its integration responsibilities. ADDNI/GMAII staff efforts included coordinating, integrating, synchronizing, and monitoring IC efforts to efficiently meld resources and capabilities, and to identify gaps and overlaps in order to quickly and effectively achieve NSMS and NSAS goals. Further, the organization's initiatives were synchronized with ODNI business practices including integration into the planning, programming and budgeting processes. The ODNI continues to guide policy, standardization processes, development and monitoring of measures of effectiveness, and enabling resourcing to achieve improvement in maritime and air domain information access, collection, integration, and analytic coordination.

Maritime:

Completed in August 2007, the "Initial Baseline Assessment of the State of the Global Maritime Community of Interest" identified many impediments to information sharing such as the lack of a national-level MDA architecture or common technical/data standards within the GMCOI. It also validated existing and programmed resources and capabilities. Notably, the report highlighted areas of concern that included: 1) an unacceptable risk of failure to recognize and/or provide important information and intelligence to those who need it in time to act; 2) a lack of governance and policy; 3) sharing roadblocks that could result in a failure to "connect the maritime dots" that could occur at any time; 4) difficulties fitting maritime intelligence activities into existing IC constructs such as the National Intelligence Priority Framework (NIPF); 5) a lack of fused analysis; 6) a lack of specific mission focus; and 7) a lack of coordinated effort and difficulties involved in exerting influence beyond the IC.[53]

As co-Chair of the MDA SHB and its ESC, ADDNI/GMAII shepherded formal recognition of the MDA Interagency Investment Strategy (IAIS) as a key document in solving the most important MDA challenges. The IAIS provided material and non-material recommendations at the federal level to achieve a coordinated national MDA capability. Its development team identified and assessed 74 MDA capability gaps, and designated 15 of them for Tier 1 (leading and most severe) status in four capability areas: 1) Management; 2) Net-Centric Dissemination; 3) Fusion/Analysis; and 4) Collection. Although not resulting in a traditional investment strategy with developed cost estimates, the IAIS provided a framework and manageable scope for identifying and performing a focused analysis of the Tier 1 tasks to inform individual department investments.

The IAIS was recently approved by the IC Mission Requirements Board (MRB) for use in subsequent requirements documents including those of the DoD, DHS, Department of Energy (DOE) and DOT. Departmental MDA Executive Agents were also designated and a revised precursor document to the MDA IAIS (October 2008 Interagency Capabilities Document (IACD)) was produced and put through the DoD Joint Capabilities Integration and Development System (JCIDS) resulting in Joint Requirements Oversight Council (JROC) approval to develop an MDA Interagen-

[52] See Appendix C: *Collaborative Support of Interagency Air Surveillance Summits.* (p C-12).
[53] See Appendix C: *Completion of a Maritime Baseline Study.* (p C-12).

cy Solutions Analysis (IASA) Plan. Also approved was the creation of an MDA IASA Core Team under the MDA ESC consisting of representatives from the department Executive Agents, ADDNI/GMAII, OGMSA, the new ODNI NMIC, and U.S. Northern and Pacific Commands. The draft IASA Plan was approved for accomplishment by the JROC in September 2009 and is awaiting MDA ESC approval.

Air:

ODNI worked aggressively through a variety of initiatives to enhance intelligence integration and improve information sharing across the air domain communities of interest. In response to an NSAS-specified task, ODNI supported a 2007 DHS and Transportation Security Administration (TSA) led effort to complete an initial Interagency assessment of the "adequacy" of intelligence information in the GADCOI. The four key findings of the assessment helped identify the framework necessary for improved information sharing: 1) an Interagency interest to develop/formalize an all-source analytic capability; 2) the need for coordination and oversight of Interagency partners to dissolve stove-pipes; 3) the negative impact to information sharing from over-classification, lack of standardization, cultural mindsets and boundaries to information sharing between intelligence and law enforcement communities; and 4) the need for the development of community training programs to develop critical analytic skill sets and provide awareness of Interagency partner missions, requirements, and relationships to enable effective, collaborative mission support. Likewise ODNI assisted the U.S. Air Force Intelligence, Surveillance and Reconnaissance Directorate (USAF A2) in the planning and preparation of a proposed ADA Capabilities Based Assessment to identify mission requirements and stakeholder capabilities, determine gaps, and recommend necessary solutions to satisfy requirements in support of Interagency ADA. ODNI also coordinated and deconflicted activities with the Air Force Intelligence Analysis Agency's (AFIAA) Sudden Spirit program.[54]

The ODNI built upon that effort by conducting an Interagency baseline assessment to identify the "As Is" state of intelligence integration and information sharing and inform decisions toward a "To Be" state of an integrated intelligence capability that will improve aviation security for the U.S. and its interests worldwide. The more comprehensive baseline was completed in September 2009 under the direction and oversight of the interagency AII-SSG with engagement by the National Security Council (NSC), and the active participation of over 60 federal air domain stakeholders. The ODNI baseline is designed to better guide interagency intelligence integration planning and implementation activities.

Strategic Objective 5: *Enable IC members to quickly eliminate critical gaps and enhance enterprise agility.*[55]

While developing national-level policies to enable GMCOI and GADCOI collaboration and horizontal integration, the ODNI staff simultaneously sought near-term achievable solutions to quickly close critical gaps where possible. Significant efforts were comprised by ground-breaking activities in Human Intelligence (HUMINT) guidance and ancillary support to Interagency groups directly involved in defense of the Homeland's air domain.

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[54] AFIAA's Sudden Spirit program provides senior leadership with analysis for counter-proliferation activities and supports the USAF in fulfilling its responsibility as the lead DoD service for the national civil air intelligence mission.

[55] "…we have absolutely no time to lose….Everything we know about al Qaeda tells us they will try to hit us again, possibly the next time with a weapon of mass destruction. We must do everything in our power to stop them before it's too late." *World At Risk: The Report of the Commission on the Prevention of WMD Proliferation and Terrorism.* December 2008. (p 112).

HUMINT is a critical asset in the identification of smuggling networks, front companies and "gray" actors involved in illicit and possible terrorist facilitation activity. ODNI therefore engaged the National HUMINT Requirements Tasking Center (NHRTC) to develop the first-ever maritime National HUMINT Collection Directive (NHCD). ODNI developed the initial draft and assisted NHRTC in its review, repeating that success with the subsequent development of the first-ever air NHCD. Establishment of these NHCDs will result in improved utilization of HUMINT resources to provide the tipper information necessary to more efficiently and effectively target other intelligence collection resources and operational surveillance assets.

ODNI collaborated with the Interagency Man Portable Air Defense System (MANPADS) Working Group to assist in the development of Indications and Warning (I&W) criteria on MANPADS threats in the U.S. ODNI also supported efforts of the Interagency Airspace Protection Working Group (IAPWG) and facilitated the establishment of a first-ever consolidated Interagency Aircraft Look-Out List repository for suspect aircraft to enable improved awareness and collaboration between federal, state, local, tribal and foreign partners engaged in analysis and interdiction of aircraft and personnel associated with illicit trafficking activity.

Strategic Objective 6: *Assess the process and make policy adjustments if necessary to ensure achievement of goals and objectives.*

Based on the results of the initial baseline assessments of the GMCOI and GADCOI in 2007, the ODNI developed and drafted ICD 902, Global Maritime and Air Intelligence Integration, to provide clear direction for the efficient and effective integration of intelligence activities related to the maritime, air and intermodal domains. The IC review and adjudication process was conducted in 2008, achieving unanimous community agreement on the policy's objectives to ensure aggressive collaboration that results in the anticipation of threats and their early resolution.

ICD 902's tenets are supported and complemented by ICD 501, Discovery and Dissemination or Retrieval of Information within the IC (see Annex B), which was promulgated shortly thereafter. ICD 501 distinguishes between "discovery" of information (awareness that information exists) and "dissemination or retrieval" (obtaining the content of the information). It also establishes information "stewards" who have the "responsibility to provide" information (make it discoverable) and establishes review boards within IC elements to resolve information access disputes.

What We Will Achieve

While much has been accomplished, considerable challenges remain to achieve the necessary level of collaboration and cooperation throughout the communities of interest that will enable the attainment of maximum unity of effort. The structure and process requires greater community agility and connectivity that calls for further integration, alignment and synchronization, without which crucial opportunities for threat prevention or an early response to an adverse event could be lost with unacceptable consequences. We are therefore determined to create a culture of collaboration; accelerate information sharing; foster analytic and collection transformation; modernize business practices that protect privacy and civil liberties; and clarify and align ODNI authorities to achieve our mission objectives. We will also work to transcend outmoded structures and surmount bureaucratic rivalries and resource competition by providing essential oversight and guidance.[56]

[56] "Interagency competition regularly centers on issues of resources, authorities, and priorities. These battles typically increase in frequency and ferocity in proportion to the institutional resources and interests at stake. This tendency was common in the interagency debate during the Balkan crises and has been endemic in the Intelligence Community from

These efforts will require an incentivized culture shift in the GMCOI and GADCOI to successfully inculcate an "imperative for change" and a "responsibility to provide." Another priority will be to institutionalize the analytic imagination required to "think outside the box" and foresee unexpected threats through the development of domain specific courses and new methods of training.

In the coming year we will continue to socialize ICD 902 and build new connections throughout the IC and all echelons of government to accelerate the capacity to discover and retrieve intelligence and information that will further enable us to "connect the dots" in advance. Significant actions that are planned include:

- Finalize the incorporation of maritime equities into the AII-SSG to make it a truly cross-domain leadership vehicle for integration and compatibility policy development.
- ODNI's NMIC continuing work in support of a National MDA Architecture.
- The review of existing maritime and air intelligence requirements and the creation of a formal system for managing future requirements. This includes collection requirements, information needs, priority intelligence requirements and essential elements of information, in order to establish and document priorities for maritime and air collection and production.
- Improve collaboration through initial engagement of state, tribal and local governments to ensure their integration into the GMCOI and GADCOI through new or existing mechanisms.
- Enhance outreach through continued engagement of the maritime private sector through joint ODNI/OGMSA conferences and initial engagement of foreign partners beyond Commonwealth Allies.
- Leverage our partnership with DHS for engagement of the air private sector to further grow the GADCOI and provide industry input into policy development.

Lastly, as the maritime and air communities of interest mature, we anticipate that the focus will eventually shift from the development of individual domain communities of interest to cross-domain integration that may result in a new global transportation domain that interconnects GMCOI and GADCOI elements in order to create and maintain a persistent awareness of all aspects of passenger and intermodal cargo conveyance. This single integrated team approach would permit 24/7 coverage of the entire transportation spectrum, further preventing the lack of handoff of information across governmental divides through the elimination of gaps and seams that could be exploited by our enemies.

Observations and Recommendations

The following highlights are areas of potential improvements in the execution of responsibilities, programs, resources and operations of the enterprise members to accelerate progress toward mission objectives.

Reestablish urgency to proactively transform the enterprises to defeat an agile enemy. We must reinvigorate GMCOI and GADCOI stakeholders with a sense of urgency that has sharply diminished in the years following 9/11, lest we suffer another strategic surprise resulting from a failure to adapt our approach. In some cases, the organizational flexibility and can-do spirit that followed the attacks has given way to institutional resistance to transformative efforts. Perceptions of a po-

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1947, through 9/11, until today." Project on National Security Reform. *Forging a New Shield.* November, 2008. (p 105).

tential loss of organizational control or resources remain major impediments to progress. To overcome this we recommend the IC adopt an incentivized approach that rewards collaborative behavior, exampled by the ODNI CIO proposed requirement to evaluate personnel performance based on a level of inter-departmental collaboration.[57] This concept must become the gold standard on all evaluations, whether it be organizational reviews and audits, or personnel appraisals.

Reaffirm information sharing as a top priority to quickly advance the closing of institutional gaps and seams through increased opportunity for authorized discovery of information. Information sharing is at the heart of the GMAII mission and must be reaffirmed as a critical priority to achieve success. Different agencies have pieces of the overall picture, but the difficulty lies in the fact that this knowledge is not being adequately synthesized; put simply, "we don't know [collectively] what we know." This information must be made accessible and discoverable.[58] We recommend the promotion of ICD 501, *Discovery and Dissemination or Retrieval of Information within the Intelligence Community*, as a model for government-wide information sharing.

Exercise IRTPA authorities through advisory tasking to further engage the Interagency to improve government-wide collaboration and unity of effort.[59] Stovepipes of information also exist within the federal government outside the IC. As we break down barriers to information sharing from within, we must correspondingly work to influence the removal of external inter-departmental barriers that impede development of the shared persistent awareness that is required to anticipate intent and detect emerging threats. We recommend increasing engagement at the Interagency and inter-departmental levels to engender a government-wide culture of information sharing leading to greater unity of effort in the GMCOI and GADCOI. High priority issues include:

- Ensuring that proper intelligence/information sharing skill sets are assigned to different departments to deepen relationships and improve government-wide collaboration.
- Ensuring that information relevant to maritime and air security is accessible and discoverable to the appropriate entities of the IC.[60]

Recommit to the tenets of IRTPA's Information Sharing Environment (ISE).[61] As a major part of IRTPA, the ISE was created to ensure the quickest path to complete horizontal integration of all echelons of government dealing with terrorism through policy development and the leveraging of legacy Information Technology (IT) systems. The success of GMAII's mission is dependant upon

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[57] *ODNI CIO Strategy and Way Ahead Brief*. October 22, 2008. (p 13). Reference is based on the IC CIO draft Information Integration and Management Strategy.

[58] The Markle Foundation Task Force on National Security in the Information Age. *Nation at Risk: Policy Makers Need Better Information to Protect the Country*. March 2009. (pp 9, 11).

[59] IRTPA; S. 2845—12. "Tasking and other Authorities.—(1) (A) The Director of National Intelligence shall— "(iii) provide advisory tasking to intelligence elements of those agencies and departments not within the National Intelligence Program.

[60] IRTPA; S. 2845—7. "Access to Intelligence.—Unless otherwise directed by the President, the Director of National Intelligence shall have access to all national intelligence and intelligence related to the national security which is collected by any Federal department, agency, or other entity, except as otherwise provided by law or, as appropriate, under guidelines agreed upon by the Attorney General and the Director of National Intelligence."

[61] IRTPA; S. 2845—28. "(b) Information Sharing Environment.— (2) Attributes.—The President shall, through the structures described in subparagraphs (B) and (C) of paragraph (1), ensure that the ISE provides and facilitates the means for sharing terrorism information among all appropriate Federal, State, local, and tribal entities, and the private sector through the use of policy guidelines and technologies. The President shall, to the greatest extent practicable, ensure that the ISE provides the functional equivalent of, or otherwise supports, a decentralized, distributed, and coordinated environment…

successful adherence and furtherance of ISE objectives. Hence, we recommend that all participants recommit attention and resources to ISE goals to accelerate this objective.

Stress the primacy of improved enterprise architecture and data standards. To advance both the GMCOI and GADCOI toward complete horizontal integration and sharing of information, we must continue to develop enterprise architectures and business reference models that maximize the latest IT solutions to overcome organizational and infrastructure barriers, e.g., the development of Q-Space for Quadripartite[62] community analysis (as an analogue of A-Space[63]) that will leverage the analytic skill sets and expertise of our closest allies. The development of Allied Collaborative Shared Services (ACSS) should also be continued as a complementary effort. We further recommend that an ODNI designee serve as the IC Communities of Interest Functional Data Standards Manager for the maritime and air domains to ensure uniformity of effort.

Use the MDA Interagency Solutions Analysis Plan as an integrated update to the MDA Interagency Investment Strategy. The findings and recommendations of the MDA IAIS are dated. It was originally researched and produced between 2005 and May 2007. It needs to be reevaluated on behalf of the GMCOI to ensure we are continuing to invest our MDA Interagency resources efficiently and effectively. Because the IASA will be a true integrated interagency investment solution, it is the best vehicle to quickly update the IAIS to better inform senior decision-makers.

Develop an Interagency HUMINT cadre for maritime and air intelligence. An Interagency cadre of HUMINT maritime and air specialists is urgently required to develop the necessary talent pool that will provide a solid foundation for a deeper understanding of threats in these domains and to identify intent and provide warning. An extensive knowledge of the networks behind illicit activity is essential to proactively identifying, interdicting and defeating a threat. A lack of robust foreign and domestic HUMINT assets hampers the capability to detect and identify place and time of hostile or disruptive actions, and the nature of a planned event that is not yet fully developed. Lack of advance warning due to time required to detect and identify the motivation, beliefs, values, strategy and goals of individuals, groups or entities is a significant concern. We recommend increased emphasis on HUMINT employment against gray actors and illicit networks which can facilitate a variety of cross-domain threat activity.

Develop Interagency maritime and air intelligence analyst training and education to improve focused analysis resulting in responsive and incisive understanding. Establishment of an Interagency training and education program for maritime and air analysts will improve analytic capability while at the same time engendering a collaborative culture within the IC and with the private sector.[64] This is especially necessary due to the increasing replacement of retiring senior analysts by new personnel who lack the requisite analytic experience and skill sets specific to this mission.[65] ODNI, in conjunction with the Naval Postgraduate School, explored the possibility of an Interagency Mari-

[62] The four countries involved in the Quadripartite agreement are the U.S., Australia, Canada and the United Kingdom.
[63] A-Space (short for Analytic Space) is an online collaboration environment spearheaded by the ODNI. It enables intelligence analysts to share information more freely, collaborate across agency lines, and connect in ways heretofore unseen. The site debuted within the IC on September 22, 2008.
[64] DNI Intelligence Science Board. *Integrating Private Sector Information into Intelligence Community Activities.* November, 2008. (p 19).
[65] Ackerman, Robert K.; AFCEA Signal Online. *Cultural Changes Drive Intelligence Analysis*. May 2007. Based on an interview with Dr. Michael Wertheimer, Assistant Deputy Director for National Intelligence and Chief Technology Officer, Directorate of Analysis, ODNI.

time National Security Professional Certificate Program that would help cultivate the relevant expertise required to accurately analyze and predict threats in the maritime domain. Additionally, ONI successfully developed and employed a Commercial Maritime Shipping Industry & Port Operations Course for analysts that can also be used as a model for a complementary air program.[66] The exploration of a private sector curriculum that would benefit industry's security and collaboration interests is also warranted.

*Create a formal mechanism for intelligence sharing amongst the GMCOI, GADCOI and the National Intelligence Council's (NIC) Committee on Foreign Investment in the U.S. (CFIUS) Support Group***.** The CFIUS anticipates an increase in cases concerning U.S. port operations and shipping lines, such as the attempted acquisition of a number of U.S. ports in 2006 by Dubai Ports International that led to Congressional scrutiny, a new statute and many changes to the CFIUS process. Routine intelligence sharing between the GMCOI, GADCOI and the NIC's CFIUS Support Group will facilitate improved ODNI support to Congress on related maritime and air legislative issues.

Maritime:

Exercise the ODNI NMIC to determine metrics on gap closure and its ability to support the Maritime Operational Threat Response (MOTR) Plan. As directed by the GMII Plan, the ODNI NMIC is to provide a national center of excellence/coordination point for maritime intelligence integration and related issues. As the ODNI NMIC works toward full operating capability (FOC), we recommend that one or more annual exercises be conducted as a measure to determine its effectiveness in closing information gaps, and developing and maintaining its support of the MOTR Plan as specified in Section VI of the GMII Plan and reinforced in ICD 902 by instructions which include:[67]

- *"...*providing accurate, relevant, timely and predictive intelligence that enables decision-makers and operational personnel to respond to threats at the earliest possible time and at the greatest distance possible from the U.S., its Allies and foreign partners."
- "support the development of a common intelligence picture among intelligence, law enforcement and operational communities in the maritime domain."

We also recommend synchronizing ODNI NMIC and IC procedures in collaboration with key stakeholders to provide the best possible coordinated and integrated maritime intelligence in support of national decision making.

Air:

Develop a governance structure for Air Domain Awareness. The Department of the Navy is leading the effort for MDA, but there is no comparable leadership or governance for ADA. The absence of direction for the Interagency has led to a lack of consensus and advancement of ADA goals and objectives, such as providing input to determine the requirement for an air analogue to the ODNI NMIC or a comparable integrated capability. We therefore recommend that an Interagency governance structure for ADA be developed and implemented as soon as possible.

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[66] The Commercial Maritime Shipping Industry & Port Operations Course was designed and is conducted by McMunn Associates, Inc. for ONI. The course was developed with support and input from the Global Maritime and Transportation School (GMATS) at the U.S. Merchant Marine Academy. The 3 week course combines interactive classroom discussions with senior industry leaders and functional visits to working port facilities to indoctrinate and orientate students in all aspects of the maritime industry to build familiarity and deepen analyst understanding of the problem set.
[67] GMII Plan; (Section VI; p 9). ICD 902; (Section E.2; p 4).

Advance the requirement for an air domain integrated capability analogue to the ODNI NMIC. The GADCOI needs to expeditiously collaborate to create an air intelligence structure or process that forms a seamless architecture and closes gaps. This could be either an analogue to the ODNI NMIC, or a virtually linked federated information enterprise that improves analysis, collection and dissemination of intelligence to strengthen aviation security.

Conclusion

Recent history provides sufficient illustration of the consequences of not being able to "connect the dots" in advance and not getting threat information to decision makers in time for effective action. Accordingly, the 9/11 Commission Report stressed the requirement for unity of effort in sharing information. The heart of GMAII's focus is to protect the Homeland from catastrophic attack involving WMD by ensuring that all elements of maritime, air and intermodal transportation intelligence and information are aligned, integrated and synchronized to prevent knowledge and communication gaps that serve the interests of our enemies. Threats that terrorists and other criminals pose to the nation's ports, waterways and airways remain persistent and grave, leaving no room for error or delay in this effort. We must be proactive and effective in leveraging all elements of the GMCOI and GADCOI to ferret out threats and address them before an attack on the U.S., our Allies, or our interests abroad is attempted. To improve our chances of interdicting those threats at an optimal distance, the IC requires an inclusive and collaborative approach to gain the critical information that lies outside of traditional intelligence collection. ODNI provides the national-level Interagency policy leadership necessary to ensure the related communities of interest are marshaled in unison against this enduring challenge.

APPENDIX A – ACRONYM LIST

A-Space	Analytic Space
ACSS	Allied Collaborative Shared Services
AII-SSG	Air Intelligence Integration Senior Steering Group
ADA	Air Domain Awareness
ADDNI/GMAII	Assistant Deputy Director of National Intelligence for Global Maritime and Air Intelligence Integration
ADSII	Air Domain Surveillance and Intelligence Integration
AFIAA	Air Force Intelligence Analysis Agency
AIS	Automatic Identification System
AMOC	Air and Maritime Operations Center
ASWG	Air Security Working Group
ATS	Air Transportation System
BA FCB	Battlespace Awareness Functional Capabilities Board
BTS PCC	Border Transportation Security Policy Coordinating Committee
C4I	Command, Control, Communications, Computers and Intelligence
C4ISR	Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance
CAASD	Center for Advanced Aviation Systems Development
CBA	Capabilities Based Assessment
CBP	Customs and Border Protection
CBRNE	Chemical, Biological, Radiological, Nuclear and High Explosives
CEE	Collaborative Experimentation Environment
CFIUS	Council on Foreign Investment in the U.S.
CG-2	U.S. Coast Guard Directorate for Intelligence and Criminal Investigations
CHOC	Charleston Harbor Operations Center
CIA	Central Intelligence Agency
CIO	Chief Information Officer
CIP	Common Intelligence Picture
COI	Community of Interest
CONOPS	Concept of Operations
CONPLAN	Concept Plan
COP	Common Operational Picture
COOP	Continuity of Operations
CPG	Capabilities Programming Guidance
CPGWG	Capabilities Programming Guidance Working Group
CUI	Controlled Unclassified Information

CTO	Chief Technology Officer
DASN	Deputy Assistant Secretary of the Navy
DDMS	DoD Discover Metadata Specifications
DDNI/PPR	Deputy Director of National Intelligence for Plans, Policy and Require-ments
D/GMSA	Director, Global Maritime Situational Awareness
DHS	Department of Homeland Security
DHS I&A	Department of Homeland Security Intelligence & Analysis
DHS S&T	Department of Homeland Security Science & Technology
DIA	Defense Intelligence Agency
DISA	Defense Information Systems Agency
DNI	Director of National Intelligence
DoD	Department of Defense
DoDIIS	Department of Defense Intelligence Information System
DOE	Department of Energy
DOJ	Department of Justice
DOS	Department of State
DOT	Department of Transportation
DS COI	Data Sharing Community of Interest
DSCA	Data Standards Coordination Activity
DSM	Data Standards Manager
DTRA	Defense Threat Reduction Agency
EA	Enterprise Architecture
EA	Executive Agent
EO	Electro-optical
E.O.	Executive Order
ESC	Executive Steering Committee
FAA	Federal Aviation Administration
FBI	Federal Bureau of Investigation
FOC	Full Operating Capability
FSA	Functional Solutions Analysis
FC	Future Capabilities
GADCOI	Global Air Domain Community of Interest
GAAST	Global Air Analysis Support Team
GDP	Gross Domestic Product
GEOINT	Geospatial Intelligence
GMAII	Global Maritime and Air Intelligence Integration
GMATS	Global Maritime and Transportation School

GMCOI	Global Maritime Community of Interest
GMII	Global Maritime Intelligence Integration
GMISS	Global Maritime Information Sharing Symposium
GMMS	Google Maps Mediation Service
GPS	Global Positioning System
GSC	Global Supply Chain
HSC	Homeland Security Council
HUMINT	Human Intelligence
IACD	Interagency Capabilities Document
IASA	Interagency Solutions Analysis
IASS	Interagency Air Surveillance Summit
IAIS	Interagency Investment Strategy
IAPWG	Interagency Airspace Protection Working Group
IC	Intelligence Community
IC ISSC	IC Information Sharing Steering Committee
ICA	Intelligence Collection Architecture
ICC	Intelligence Coordination Center
ICD	Intelligence Community Directive
ICE	Immigration and Customs Enforcement
ICIS	Intelligence Community Information Sharing
ICR	Intelligence Community Requirements
IIWG	Interagency Implementation Working Group
INSA	Intelligence and National Security Alliance
IRTPA	Intelligence Reform and Terrorism Prevention Act
IRWG	Interagency Requirements Working Group
ISAC	Information Sharing and Analysis Center
ISB	Intelligence Science Board
ISE	Information Sharing Environment
ISO	International Organization for Standardization
ISR	Intelligence, Surveillance and Reconnaissance
ISSC	Information Sharing Steering Committee
ISSC	Information Sharing Subcommittee
ISST	Interagency Surveillance Study Team
IT	Information Technology
ITU	Intermodal Transport Units
I&W	Indications and Warning
JCB	Joint Capabilities Board
JCD	Joint Capabilities Document

JCIDS	Joint Capabilities Integration and Development System
JPDO	Joint Planning and Development Office
JRIC	Joint Reserve Intelligence Center
JRIP	Joint Reserve Intelligence Program
JROC	Joint Requirements Oversight Council
MANPADS	Man-Portable Air Defense System
MARAD	Department of Transportation's Maritime Administration
MDA	Maritime Domain Awareness
MDA DS COI	Maritime Domain Awareness Data Sharing Community of Interest
MDA IAIS	Maritime Domain Awareness Interagency Investment Strategy
MDA ISSC	Maritime Domain Awareness Information Sharing Subcommittee
MDA SHB	Maritime Domain Awareness Stakeholder's Board
MINTWG	Multi-Intelligence Working Group
MIST	Maritime Information Sharing Taskforce
MOTR	Maritime Operational Threat Response
MRB	Mission Requirements Board
MSIPC	Maritime Security Interagency Policy Committee
MSPCC	Maritime Security Policy Coordinating Committee
MSWG	Maritime Security Working Group
MTS	Maritime Transportation System
NASA	National Aeronautics and Space Administration
NAVSEASYSCOM	Naval Sea Systems Command
NCES	Net Centric Enterprise Services
NCIS	Naval Criminal Investigative Service
NCPC	National Counterproliferation Center
NCR	National Capital Region
NCTC	National Counterterrorism Center
NEO	Network Enabled Operations
NETEX	Net-Centric Experiment
NextGen	Next Generation
NGA	National Geospatial-Intelligence Agency
NGATS	Next Generation Air Transportation System
NHCD	National HUMINT Collection Directive
NHRTC	National HUMINT Requirements Tasking Center
NIAB	NMIC Interagency Advisory Board
NIAWG	National Maritime Intelligence Center (NMIC) Interagency Working Group
NIC	National Intelligence Council

NIC-C	National Intelligence Coordination Center
NIPF	National Intelligence Priorities Framework
NMATS	National Maritime Awareness Technology Sub-committee
NMIC	National Maritime Intelligence Center
NOAA	National Oceanic and Atmospheric Administration
NORAD	North American Aerospace Defense Command
NRL	Naval Research Laboratory
NRO	National Reconnaissance Office
NSA	National Security Agency
NSAS	National Strategy for Aviation Security
NSC	National Security Council
NSMS	National Strategy for Maritime Security
NSP	National Signatures Program
ODNI	Office of the Director of National Intelligence
ODON CIO	Office of the Department of the Navy Chief Information Officer
OGMSA	Office of Global Maritime Situational Awareness
ONI	Office of Naval Intelligence
ONR	Office of Naval Research
OSAC	Department of State's Overseas Security Advisory Council
PDDNI	Principal Director for National Intelligence
PM-ISE	Program Manager – Information Sharing Environment
POA&M	Plan of Action and Milestones
PSI	Proliferation Security Initiative
Q-Space	Quadripartite Space
RDD	Radiological Dispersal Device
SAG	Senior Advisory Group
SAR	Synthetic Aperture Radar
SECDEF	Secretary of Defense
SEM	Strategic Enterprise Management
SHB	Stakeholder's Board
SILO	Single Integrated Look-Out
SIPRNET	Secret Internet Protocol Routing Network
SME	Subject Matter Expert
SPC	Senior Policy Committee
SRI	Stanford Research Institute
Sub-IPC	Sub-Interagency Policy Committee
SWG	Stakeholder Working Group
TBS IPC	Trans-Border Security Interagency Policy Committee

TEU	Twenty-foot Equivalent Unit
TRES	Department of the Treasury
TSA	Transportation Security Administration
TW08	Trident Warrior 2008
TWG	Threat Working Group
UAV	Unmanned Aerial Vehicle
UDOP	User Defined Operational Picture
USAF	United States Air Force
USCG	United States Coast Guard
USD(I)	Undersecretary of Defense for Intelligence
U.S.	United States
USG	United States Government
USN	United States Navy
WMD	Weapon(s) of Mass Destruction

APPENDIX B – CHRONOLOGY OF SIGNIFICANT MILESTONES

Maritime:

- December 2004 – National Security Presidential Directive-41 / Homeland Security Presidential Directive-13 (NSPD-41/HSPD-13) Maritime Security Policy issued
- September 2005 – National Strategy for Maritime Security (NSMS) issued
- October 2005 – NSMS' National Plan to Achieve Maritime Domain Awareness issued
- October 2005 – NSMS' Global Maritime Intelligence Integration (GMII) Plan issued
- July 2006 – DNI accepted U.S. Coast Guard nomination of RADM Richard Kelly, USCG as the first Assistant Deputy Director for National Intelligence (ADDNI), GMII and the Undersecretary of Defense for Intelligence (USD(I)) nomination of Ms. Theresa Ramsey as Deputy Director, GMII
- October 2006 – GMII mission was established at the Office of the Director of National Intelligence (ODNI) within Plans, Policy and Requirements
- February 2007 – ODNI GMII Staff further assigned air intelligence integration for the Intelligence Community (IC) and was subsequently renamed Global Maritime and Air Intelligence Integration (GMAII)
- June 2007 – ADDNI/GMAII and the Director, Office of Global Maritime Situational Awareness established the Maritime Domain Awareness Stakeholder's Board (MDA SHB) and Senior Steering Committee
- December 2007 – ADDNI/GMAII and the Office of Naval Intelligence (ONI-4) reviewed NMIC facility Information Technology (IT) requirements
- February 2008 – ADDNI/GMAII began drafting Intelligence Community Directive (ICD) 902, Global Maritime and Air Intelligence Integration
- March 2008 – ADDNI/GMAII initiated coordination with the National HUMINT Requirement Tasking Center for a draft Maritime National HUMINT Collections Directive
- June 2008 – Department of Defense (DoD) designated the U.S. Navy as its Executive Agent to lead National MDA Enterprise Architecture (EA) development;
- July 2008 –ADDNI/GMAII selected to co-Chair the MDA Information Sharing Sub Committee
- October 2008 – ADDNI/GMAII and staff moved from ODNI Plans, Policy and Requirements to the National Intelligence Coordination Center (NIC-C) within ODNI Collections
- December 2008 – ADDNI/GMAII completed IC Segment Architecture to roll into National MDA EA
- December 2008 – The IC's Information Sharing Data Standards Coordination Activity nominated the position of ADDNI/GMAII to become the IC Air / Maritime Communities of Interest Functional Data Standards Manager
- December 2008 – DNI accepted U.S. Navy nomination of RADM Ann Gilbride, USNR as the first Director, ODNI NMIC and U.S. Coast Guard nomination of RDML Daniel Lloyd, USCG as Deputy Director
- January 2009 – ICD 902 signed by the DNI
- January 2009 – ODNI NMIC established
- June 2009 – RDML Roy Nash, USCG replaced RDML Daniel Lloyd, USCG as Deputy Director, ODNI NMIC
- August 2009 – ODNI NMIC CONOPs approved – resources to be determined

- October 2009 – RADM Thomas Meek, USN replaced RADM Ann Gilbride, USNR as Director, ODNI NMIC
- Currently – Memorandums of Agreement with potential ODNI NMIC Interagency partners are in development

Air:

- June 2006 – National Security Presidential Directive-47 / Homeland Security Presidential Directive-16 (NSPD-47/HSPD-16) Aviation Security Policy issued
- September 2006 – National Strategy for Aviation Security (NSAS) issued
- February 2007 – ODNI GMII Staff further assigned air intelligence integration for the IC and was subsequently renamed Global Maritime and Air Intelligence Integration (GMAII)
- March 2007 – NSAS' Air Domain Surveillance and Intelligence Integration (ADSII) Plan issued
- March 2007 – DNI tasked with IC coordination on 112 NSAS implementation actions
- July 2007 – ADDNI/GMAII Air Team cadre established with U.S. Air Force, Transportation Security Administration (TSA) and Federal Aviation Administration (FAA) detailees
- October 2007 – ADDNI/GMAII completed an initial subset of the 112 NSAS implementation actions
- February 2008 – ADDNI/GMAII began drafting ICD 902, Global Maritime and Air Intelligence Integration
- March 2008 – Guided Interagency completion of the 16 ADSII Plan implementation actions out of the 112 overall NSAS actions
- May 2008 – Stood up an Air Intelligence Integration Senior Steering Group consisting of representatives from the ODNI, Department of Homeland Security, Department of Justice, and DoD USD(I) and Director for Intelligence, J2, Joint Staff
- June 2008 – ADDNI/GMAII began the first comprehensive baseline assessment of air intelligence for the Global Air Domain Community of Interest
- September 2008 – ADDNI/GMAII updated National Intelligence Priority Framework (NIPF) language and analytic requirements for aviation security
- September 2008 – ADDNI/GMAII initiated coordination with the National HUMINT Requirement Tasking Center for a draft Air National HUMINT Collections Directive
- October 2008 – ADDNI/GMAII staff moved from ODNI Plans, Policy and Requirements to the National Intelligence Coordination Center (NIC-C) within ODNI Collections
- December 2008 – ADDNI/GMAII collaborated on the creation of an Interagency way-ahead plan for Integrated Air Surveillance
- December 2008 – ADDNI/GMAII contributed to Customs and Border Protection's Air and Maritime Operations Center strategic planning for a "national" air operations center
- January 2009 – ICD 902 signed by the DNI
- January 2009 – Merged the maritime mission into the Air Intelligence Integration Senior Steering Group, shifting the body's focus holistically toward intermodal conveyance
- February 2009 – ADDNI/GMAII was a key participant in the development of an Integrated Air Surveillance Concept of Operations and Enterprise Architecture with Interagency partners to satisfy the objectives of the Interagency way-ahead plan for Integrated Air Surveillance

- June 2009 – ADDNI/GMAII completed and released the Air Intelligence Integration Baseline Assessment of the Global Air Domain Community of Interest Intelligence Enterprise
- July 2009 – ADDNI/GMAII contributed to the completion of the JPDO Integrated Air Surveillance CONOPS
- October 2009 – ADDNI/GMAII contributed to the Integrated Air Surveillance Enterprise Architecture

APPENDIX C – STRATEGIC OBJECTIVE ACCOMPLISHMENTS

Strategic Objective 1: *Provide leadership for maritime, air, and ultimately, transportation domain intelligence integration.*

Maritime:

Establishment of a Maritime Domain Awareness Stakeholders Board (MDA SHB). The MDA SHB is an Interagency body created to align and integrate Global Maritime Community of Interest (GMCOI) efforts to achieve MDA objectives. Its authority and responsibilities are derived from agreement between the Assistant Deputy Director of National Intelligence for Global Maritime and Air Intelligence Integration (ADDNI/GMAII)[68] and the Director, Global Maritime Situational Awareness (D/GMSA)[69] as a means to implement recommendations of the National Concept of Operations for MDA (MDA CONOPS) and other initiatives which fall under the National Plan to Achieve MDA.[70] Notably, the ADDNI/GMAII and the D/GMSA are members of the Maritime Security Interagency Policy Committee (MSIPC)[71] and are the co-Chairs of the MDA SHB. They are responsible for promoting unity of effort, standardization and appropriate access to a wide range of information critical to achieving MDA. Through the co-Chairs and an Executive Steering Committee (ESC), the MDA SHB communicates recommendations to the MSIPC regarding strategic level guidance and policy to improve MDA. The MDA SHB also advises the ADDNI/GMAII and D/GMSA on MDA resource issues and proposes refinements to the integrated MDA Interagency Investment Strategy (IAIS).

The MDA SHB includes representatives from a broad cross-section of stakeholder agencies and those agencies responsible for the eight supporting plans approved under the National Strategy for Maritime Security (NSMS)[72] including Customs and Border Protection (CBP), Federal Bureau of Investigation (FBI), Immigration and Customs Enforcement (ICE), the Intelligence Community (IC), U.S. Coast Guard, U.S. Navy and the Department of State (DOS). It focuses its efforts on making recommendations to optimize capabilities related to the key functional aspects of MDA, i.e., the collection, fusion, analysis and dissemination of data, information, and intelligence. It also assists in policy coordination alignment, synergy and issue resolution.

The MDA SHB's ESC is the organization's decision-making body. It decides on courses of action for all recommendations put forth by the full MDA SHB; establishes and reviews progress of

[68] The Assistant Deputy Director of National Intelligence for Global Maritime and Air Intelligence Integration (ADDNI/GMAII) is the ODNI designee for holistically tackling maritime, air and other related domain collaboration challenges.

[69] The Office of Global Maritime Situational Awareness (OGMSA) is an Interagency organization whose mission is to facilitate the creation of a collaborative and global maritime information sharing environment through unity of effort across entities with maritime interests. They are the operational surveillance complement to ADDNI/GMAII's maritime intelligence integration mission.

[70] The National Plan to Achieve MDA lays the foundation for an effective understanding of anything associated with the Maritime Domain that could impact the security, safety, economy, or environment of the U.S. and for identifying threats as early and as distant from our shores as possible.

[71] Formerly named the Maritime Security Policy Coordinating Committee (MSPCC).

[72] The eight NSMS supporting plans are: the National Plan to Achieve Maritime Domain Awareness; Global Maritime Intelligence Integration Plan; Maritime Operational Threat Response Plan; International Outreach and Coordination Strategy; Maritime Infrastructure Recovery Plan; Maritime Transportation System Security Plan; Maritime Commerce Security Plan; and Domestic Outreach Plan.

sub-committees[73] as directed by the co-Chairs; and provides the MSIPC with final recommendations to update strategic-level guidance and revise policy as appropriate. ESC membership consists of the MDA SHB co-Chairs and MDA Executive Agents (EA) from the Department of Homeland Security (DHS), Department of Transportation (DOT) and the Department of Defense (DoD).

The MDA SHB Interagency Requirements Working Group (IRWG) reviewed initiatives such as the Information, Cargo and Architecture Enterprise Hubs, Information Sharing governance and Intelligence Collection Architecture (ICA) proposals, reporting results to the MDA SHB through the ESC for consideration and potential policy development.

Establishment of a Ship Tracking Senior Advisory Group (SAG). ADDNI/GMAII stood-up a SAG to ensure effective integration, alignment and coordination of ship tracking assets. The collaborative effort yielded improved and increased automated ship tracks, and a hybrid tracker using the best of National Security Agency (NSA) and Naval Research Laboratory (NRL) capabilities. The SAG's membership included the U.S. Coast Guard's Directorate for Intelligence & Criminal Investigations (CG-2), National Reconnaissance Office (NRO), Office of Naval Intelligence (ONI), and Deputy Assistant Secretary of the Navy (DASN) for Command, Control, Communications, Computers and Intelligence (C4I) and Space.[74]

Establishment of a National Maritime Intelligence Center (NMIC) Steering Committee and NMIC Interagency Working Group (NIAWG). ADDNI/GMAII's early efforts to address the tasks of maritime intelligence integration were focused on developing the NMIC Steering Committee,[75] specifically to improve ONI and Intelligence Coordination Center (ICC) collaboration. Preparatory to the informal stand-up of the Office of the Director of National Intelligence (ODNI) NMIC, and per direction to the IC from the National Security Council / Homeland Security Council (NSC/HSC) Deputies Committee and Principal Deputy Director of National Intelligence (PDDNI), ADDNI/GMAII stood up the NIAWG to begin specific concept development of a national center in May 2008. The more inclusive NIAWG increased collaboration by ensuring representation of a cross-section of the IC and Interagency partners to broaden perspective and widen participation.[76] Its collaborative achievements included:

- Initiated development of a concept of operations clarifying the ODNI NMIC's integration roles, scope of activities and IC relationships as a supported or supporting center.
- Validated incorporation of Interagency representation and method.
- Refined mission and organizational framework to include a focus on transnational criminal organization network analysis and associated elements of people, cargo, conveyances and infrastructure, taking advantage of existing IC capabilities within a flat, distributed architecture.

[73] MDA SHB ESC subcommittees include the MDA Information Sharing Subcommittee (ISSC) and the National Maritime Awareness Technical Subcommittee (NMATS) which is attempting to catalogue MDA related technologies across the U.S. Government (USG).
[74] See National All-Source Fusion Ship Tracking Service. (p C-9).
[75] The NMIC Steering Committee was comprised of ADDNI/GMAII, ONI and ICC personnel.
[76] IC and Interagency representation on the NIAWG included the ADDNI/GMAII, U.S. Navy's Office of Naval Intelligence (ONI) and Naval Criminal Investigative Service (NCIS), U. S. Coast Guard's Intelligence Coordination Center (ICC), Central Intelligence Agency (CIA), National Counterterrorism Center (NCTC), National Counterproliferation Center (NCPC), National Geospatial-Intelligence Agency (NGA), National Security Agency (NSA), Federal Bureau of Investigation (FBI), Department of Homeland Security (DHS), Department of the Treasury (TRES) and the Department of Transportation's (DOT) Maritime Administration (MARAD).

- Developed interactive analytic framework with an increased focus on transnational criminal organization network analysis.
- Performed functional analysis, including information technology connectivity requirements.
- Incorporated MDA Enterprise Hub requirements.
- Enhanced NIAWG CONOPS development through mission analysis performed by the Director of Naval Intelligence.

The NIAWG was replaced by the NMIC Interagency Advisory Board[77] upon approval of the ODNI NMIC CONOPS in August 2008.

Engaged the Office of Global Maritime Situational Awareness (OGMSA). The mission of OGMSA (an Interagency entity) is to facilitate the creation of a collaborative global, maritime, information sharing environment through unity of effort across entities with maritime interests. The intelligence integration activities of the ADDNI/GMAII complemented this undertaking, and the two staffs coordinated closely to deconflict efforts while exploiting attendant synergies. For example, the Global Maritime Intelligence Integration (GMII) Plan could not be executed and managed within the IC alone. OGMSA's User Defined Operational Picture (UDOP)[78] and the GMII Plan's Common Intelligence Picture (CIP) are inseparable and mutually supportive. The two staffs frequently collaborated on issues that included:

- The establishment of four Information Enterprise Hubs to facilitate and coordinate information flow: Cargo; Vessels; People and Infrastructure.[79]
- The establishment of an Enterprise Architecture Management Hub to link subject matter experts to build a net-centric environment through which the GMCOI can share data.
- Private sector outreach (see pages C-10 and C-11 for greater detail).

Engaged the Department of Transportation's Maritime Administration (MARAD). MARAD's mission is to improve and strengthen the U.S. Marine Transportation System (MTS), including infrastructure, industry and labor, to meet the economic and security needs of the nation. It is also the lead agency for maritime matters within DOT and was designated by Congress as the MTS Information Advocate to serve as the focal point for information management. ADDNI/GMAII routinely engages MARAD through its membership on the MDA SHB, leveraging its role as a non-IC maritime information advocate to foster information sharing and partnerships among all levels of government, the maritime commercial industry, academia, non-governmental organizations and foreign governments. Results of this collaboration include a closer working relationship between the IC and the maritime industry, ensuring that commercial entities have a strong voice in IC policy development and increasing public trust. Another outcome has been the consolidation of disparate U.S. Government (USG) maritime conferences (including the related Office of the Director of National Intelligence (ODNI) annual private sector outreach conference) into OGMSA's annual Global Mari-

[77] The NMIC Interagency Advisory Board (NIAB) was established in August 2008 to leverage partner relationships, improve inter-organizational understanding and advance the conceptual growth of the ODNI NIMC.
[78] OGMSA's UDOP design provides: (1) standard data, with infinite images and views; (2) access to raw data allowing distributed analysis; (3) transmission of only that information which is needed; and (4) community data sharing.
[79] An Information Sharing Hub is an association or grouping of MDA stakeholders with expertise or data requirements in specific areas of information (e.g., cargo, vessel, people, infrastructure), established for the purpose of increasing the awareness, availability, quantity and quality of maritime data and information. They advocate the development of standards for maritime data information beyond the capability of a single stakeholder.

time Information Sharing Symposium (GMISS)[80] thereby creating one overarching event that has reduced the financial burden on industry to attend multiple USG venues throughout the year while increasing IC interaction with maritime industry leaders. This action is also exploiting inter-departmental synergies that will continue to increase efficiencies and reduce cost.

Provided IC Leadership and Decision Support to the National Security Council /Homeland Security Council. As the DNI's representative to the MSIPC, the ADDNI/GMAII supported national-level policy development and decisions at the MSIPC and its supporting Maritime Security Working Group (MSWG). ADDNI/GMAII facilitated direct IC subject matter expert (SME) support to NSC/HSC deliberations on issues that included:

- Mining Threats to U.S. Ports.
- Self-Propelled Semi-Submersible Threats to the U.S.
- Foreign Port Threat Assessments.
- Horn of Africa Piracy.
- Arctic Maritime Security Policy.

Air:

Establishment of an Air Intelligence Integration Senior Steering Group (AII-SSG). The ADDNI/GMAII created an AII-SSG of senior executives from across the IC that includes: DoD (Under-secretary of Defense for Intelligence (USD(I)) and Joint Staff J2, DHS Office of Intelligence & Analysis (DHS I&A) and the FBI's National Security Branch to represent air domain intelligence stakeholders' equities and responsibilities in support of information sharing and intelligence integration. The group oversees IC efforts to identify and analyze threats to the global air domain, integrate the Global Air Domain Community of Interest (GADCOI), promote a seamless intelligence enterprise architecture, and inform the Director of National Intelligence (DNI) regarding execution of ODNI responsibilities under the National Strategy for Aviation Security (NSAS). Issues undertaken by the AII-SSG include:

- Identification and description of the "To Be" critical elements of an integrated air intelligence capability, emphasizing integrated collection and analysis processes.
- Authorization of an Interagency air intelligence baseline assessment to determine the "As Is" of the air domain community of interest.
- Guided incorporation of maritime equities to form a combined air and maritime SSG to steer intelligence integration within the separate domains and facilitate cross-domain compatibility and integration.
- Developed and staffed an Interagency charter to formalize the SSG.
- Sponsored four SSG quarterly meetings to advance integration initiatives.

Ensured IC Input to Joint Planning and Development Office (JPDO) Activities.[81] The ADDNI/GMAII coordinated with JPDO staff and DOT's Federal Aviation Administration (FAA) to enable the first-ever IC representation in the JPDO Interagency governance structure. ADDNI/GMAII gained ODNI participation in the JPDO Executive Board and the department-level Senior Policy Committee (SPC) oversight body to ensure representation of IC equities and capabilities in the

[80] GMISS is an annual event hosted by OGMSA to align USG outreach to the maritime industry and improve and increase industry-government maritime information sharing partnerships. Office of Global Maritime Situational Awareness website. (http://www.gmsa.gov/gmiss/overview.html). Accessed May 20, 2009.
[81] See footnote 40.

planning and implementation of the JPDO-lead activities in support of the Next Generation (Next-Gen) Air Transportation System (NGATS) for the United States. ADDNI/GMAII provided IC collaborative support to: 1) facilitate IC integration into NextGen to improve Air Domain Awareness (ADA); and 2) advance associated collaborative Interagency efforts toward NextGen. The SPC will also assume interim governance responsibilities to oversee and coordinate efforts to integrate the Interagency air surveillance capabilities, pending the establishment of a permanent governance structure. The PDDNI formally accepted Ex-Officio membership in the JPDO SPC governance structure to further the integration of IC equities and capabilities in NextGen planning and implementation efforts and to facilitate IC integration for enhanced ADA.

- ADDNI/GMAII also participated in the development and coordination of the JPDO Interagency Surveillance Study Team (ISST) report to advise Congress and the Executive Branch on air surveillance challenges and recommend Interagency collaborative efforts to plan and implement an integrated surveillance capability for the USG. The report concluded that an Interagency governance mechanism is needed to effectively integrate air surveillance requirements, planning and investment. The engagement of the SPC in air surveillance planning and implementation and the inclusion of ODNI is a direct result of the ISST report.

Provided IC Leadership and Decision Support to the National Security Council / Homeland Security Council. As the DNI's representative to the Trans-Border Security Interagency Policy Committee (TBS IPC)[82] and its Aviation Security Sub-Interagency Policy Committee (Sub-IPC), the ADDNI/GMAII supported national-level policy development and decisions on aviation intelligence issues that included:

- Interagency efforts to reduce international Man-Portable Air-Defense Systems (MANPADS) threats and to mitigate the potential for domestic MANPADS threats. This contributed to HSC Deputies Committee support for an Interagency program review and procurement to strengthen domestic security efforts.
- Air Domain Surveillance and Intelligence Integration (ADSII) Implementation Plans for Enhanced Surveillance Coverage (ADSII-102) and Data Integration (ADSII-103).
- Input on the Aviation Transportation System (ATS) Recovery Implementation Plan.
- Establishment of an air surveillance governance structure and CONOPS.
- Development of an air surveillance integrated Enterprise Architecture.
- A variety of ad hoc initiatives including Interagency coordination and support of an FAA Notice of Proposed Rule Making efforts to make permanent the Air Defense Identification Zone around the National Capital Region.
- Potential for IPC focus on specific Land Border Security.

Strategic Objective 2: *Develop the construct and architecture to support information sharing.*

Collaboration with the Program Manager – Information Sharing Environment (PM-ISE). The ADDNI/GMAII's mission, tasks and authorities for information sharing within the maritime and air domains built synergistically on those of the Program Manager – Information Sharing Environment (PM-ISE) to bring about horizontal integration and information sharing between the IC, defense, homeland security, law enforcement, state, local, tribal and private sectors. ADDNI/GMAII established a collaborative engagement with the PM-ISE staff to develop a National Functional Standard

[82] Formerly named the Border Transportation Security Policy Coordinating Committee (BTS PCC).

for Cargo and Conveyance guided by both the Common Terrorism Information Sharing Standard and the PM-ISE's Guideline 2 to develop a common framework for information sharing.

Data Standards Manager for Maritime and Air Intelligence. Pursuant to the GMII Plan's requirement for identification and promotion of domain specific standards, the IC Chief Information Officer (CIO) sought to designate a Data Standards Manager (DSM) for both maritime and air intelligence. Upon implementation, the DSM will be responsible for:

- Life-cycle management of the information sharing Controlled Unclassified Information (CUI) data standards for the maritime and air intelligence Communities of Interest (COI).
- Implementing all tasks and policy guidance associated with the maritime and air intelligence COI data standards.
- Working with interested organizations and existing data standards forums, both inside and external to the IC.

Integration of DoD Discover Metadata Specifications (DDMS) into IC and Interagency maritime and air intelligence systems. IC adoption of DDMS is improving users' and systems' ability to discover, locate and access information resources throughout the combined DoD-IC enterprise. ADDNI/GMAII worked to support this process and to expand it to the Interagency.

Efforts to Improve Technical Standards. ADDNI/GMAII engaged the Office of the ODNI CIO and the IC's Information Sharing Data Standards Coordination Activity (DSCA) to develop functional data standards for cargo and conveyance. The DSCA coordinates and recommends standards to the IC Information Sharing Steering Committee (ISSC) for use across the IC and, through reciprocal agreements, the DoD. ADDNI/GMAII presented a statement of need for the cargo and conveyance standard to the DSCA, and worked with it and the GMCOI to develop a recommended detailed standard and an appropriate implementation process.

IC Support to Customs and Border Protection Air and Maritime Operations Center (AMOC).[83] ADDNI/GMAII assisted CBP's AMOC with their Phase B Strategic Planning initiatives to define future AMOC requirements to support Interagency operations. ADDNI/GMAII efforts directly influenced the "To Be" state for the future AMOC integrated national surveillance capability. Phase B strategic planning engaged stakeholders across the Federal government to assess customer requirements and information needs to guide the AMOC planning and investment strategy for expansion of its capabilities to better support national air, and eventually maritime, homeland security requirements.

ODNI Support for the National Signatures Program (NSP).[84] ADDNI/GMAII engaged the NSP to ensure maritime and air domain equities were incorporated into ongoing signature collection and cataloguing efforts.

Chief Information Officer Staff Integration. The IC CIO integrated two staff members into the ADDNI/GMAII staff to assist in the development of existing and new intelligence information sharing services to enhance intelligence integration and collaboration across multiple security levels. Their efforts include:

[83] The AMOC serves as the national law enforcement interdiction center, detecting, tracking, and supporting interdiction of people and conveyances that illegally cross U.S. borders and boundaries.
[84] The NSP is a joint multi-community federated program initiated by the Defense Intelligence Agency to provide a diverse customer base with accessibility to high-quality signatures.

- Facilitating participation in IC Information Sharing Steering Committee meetings.
- Developing the Maritime and Aviation Data Reference Model subset of the IC Business Transformation Model.
- Developing a national integrated MDA architecture.

Maritime:

Global Maritime Intelligence Community of Interest Intelligence Architecture. ADDNI/GMAII concluded the initial phase of the GMCOI Intelligence Architecture effort in December 2008. It was a first step to providing enhanced understanding of current maritime intelligence capabilities, relationships, and information exchanges. The effort enhanced decision-makers' awareness of GMCOI activities while laying the foundation for future architectural work across the enterprise. The GMCOI Intelligence Architecture documented the current state of maritime intelligence and mapped it to the IC Enterprise Architecture Business Reference Model, thereby highlighting areas for deeper study. The project also included a detailed way-ahead plan documenting architecture best practices and an appropriate path for future efforts.

GMCOI Stakeholder Working Group (SWG). The GMCOI SWG supported development of the GMCOI Intelligence Architecture by involving community-wide participants who validated the information collected about their organizations through previous reports and studies, publically available briefings and documents, and stakeholder interviews.

Co-Chair for MDA Data Services Community of Interest (DS COI) Policy Committee. As co-Chair for the Interagency MDA DS COI Policy Committee, ADDNI/GMAII led the development of a common data dictionary, web-enabled methods to share a Single Integrated Look-Out (SILO) list of vessels of interest, an enhanced maritime Common Operational Picture (COP), and much improved access to international cargo information within the GMCOI. These efforts supported the stand-up of the new ODNI National Maritime Intelligence Center which will employ the advancements in furtherance of its intelligence and information sharing integration efforts.

MDA Information Sharing Subcommittee. The ADDNI/GMAII was instrumental in developing the charter for and standing up the MDA ISSC which supports the MDA SHB and serves as the coordination body within the maritime domain for information sharing issues. The MDA ISSC is engaged with planning a proposed transition of the MDA DS COI, its Spiral III Legal Review, and the MDA Information Hubs' role in identifying and promoting Functional Data Standards.

Information Sharing Support of National MDA Architecture Efforts. ADDNI/GMAII worked with the Office of the Department of the Navy Chief Information Officer (ODON CIO) and OGMSA to develop the National MDA Architecture as described in the National MDA CONOPS. The ODON CIO has the lead for this effort and worked with ADDNI/GMAII's Chief Architect to gather background data, form a Plan of Action and Milestones (POA&M), and identify resources for a multi-year effort to develop an inter-departmental MDA Enterprise Architecture.

MDA Data Sharing Community of Interest. The MDA DS COI supported Trident Warrior 2008 (TW08), the Navy's annual FORCENet[85] sea trial. As part of that support, the MDA DS COI demonstrated two new capabilities:

[85] FORCENet provides the naval command and control component for Sea Power 21 and Expeditionary Warfare, enhancing every aspect of naval, joint and combined operations. Accessed May 20, 2009. U.S. Navy. (http://www.navy.mil/navydata/policy/forcenet/forcenet21.pdf).

- A net centric cross domain solution to publish unclassified MDA data from the Net Centric Enterprise Services (NCES) Messaging Service to the NCES Messaging Service on the Secret Internet Protocol Routing Network (SIPRNET), leveraging the Defense Information Systems Agency's (DISA) Information Assurance (IA)/32 Cross Domain Web Services Gateway.
- A new Automatic Identification System (AIS) data source from the Global Hawk Maritime Demonstration unmanned aerial vehicle (UAV) supporting TW08.

To demonstrate data being visible and accessible on the SIPRNET, the MDA DS COI created a Google Maps Mediation Service (GMMS) on the SIPRNET that is subscribing to the unclassified AIS data on the NCES Messaging Service on the SIPRNET from the Cross Domain Web Services Gateway.

Maritime Information Sharing Taskforce (MIST). ADDNI/GMAII partnered with the Naval Postgraduate School's Maritime Defense and Security Program and the Department of Transportation's Maritime Administration to establish the MIST to improve bi-lateral sharing of maritime threat information between private sector shipping and federal, state and local government agencies. The first two MIST workshops (conducted at the Ports of Long Beach and Los Angeles; and the Port of Seattle) focused on processes for incorporating local, practitioner-level input into the sharing of maritime threat information and integration of private sector and local governmental data into the national maritime security effort. The taskforce developed a federated network-centric process for the sharing of threat information at the local port level that included an interactive web site and the use of user polls. The workshop provided valuable data to improve incentives for private sector information sharing, measures of performance, better collaboration, and the quality of, and local access to, maritime threat information. Plans for another MIST workshop at a major east-coast port are in development.

Port Security Information Exchange Projects. ADDNI/GMAII collaborated with two Congressionally-funded port security information exchange demonstrations to improve MDA information sharing processes with local and state seaport operations and security agencies. Stanford Research Institute (SRI) was contracted by the Naval Sea Systems Command (NAVSEASYSCOM) to implement a law enforcement port security information exchange capability in support of the following Florida ports: Port Everglades (Ft. Lauderdale); Tampa and Jacksonville. SRI is also developing a comprehensive MDA capability at the Port of Tampa that is similar to the Department of Justice's Project Seahawk[86] at the Port of Charleston, South Carolina.

Improvements to StoneGhost[87] Collaboration. ADDNI/GMAII successfully collaborated with the StoneGhost Quadripartite Technical Advisory Team to access a StoneGhost SharePoint site from an ONI workstation demonstrating improved interoperability between the IC and Department of Defense Intelligence Information System (DoDIIS) domains. This led to the establishment of a Share-

[86] The "Intermodal Transportation and Port Security Pilot Project -Charleston Harbor Operations Center and Project SeaHawk Task Force" is an intermodal transportation and port security pilot project that was initially sponsored by the Department of Justice (DOJ) following establishment and funding by Congress through the FY03 Omnibus Appropriations Bill. Project SeaHawk has four components: (1) a Multi-agency Intermodal Task Force (SeaHawk); (2) an Intermodal Fusion & Analysis Center; (3) an Interagency Operations Center/Charleston Harbor Operations Center (CHOC); and (4) an Intermodal Test & Evaluation Center. Project SeaHawk transitioned from DOJ to DHS control on October 1, 2009.

[87] StoneGhost is a secure computer liaison network used by the U.S. and its Commonwealth Allies.

Point site for ONI with an interim collaboration tool until the new Quadripartite Space (Q-Space) is operationally fielded.

National Maritime Awareness Technology Sub-committee (NMATS). The NMATS is an organizational unit of the national MDA structure under the MDA Stakeholders Board, and advises it and the ESC of applicable supporting maritime information sharing technologies. It is co-chaired by OGMSA's Technical Advisor and by the Director of Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) at the U.S. Navy's Office of Naval Research (ONR). NMATS performs periodic review and update on technologies related to MDA in advance of upcoming MDA Stakeholders' Board meetings.

National All-Source Fusion Ship Tracking Service. The NSMS and the resulting MDA CONOPS directed that the GMCOI maintain persistent monitoring of worldwide maritime shipping both for the protection of maritime commerce and to provide alerts for threats emerging from the maritime environment. Multiple agencies across the USG had contributing responsibilities for collection, exploitation, analysis and dissemination of data and information required to accomplish persistent monitoring of vessel activities around the world. A new level of cooperation and integration among these agencies was required to achieve effective holistic monitoring; a major goal of the ADDNI/GMAII inspired S*hip Tracking Senior Advisory Group (SAG).*[88] Key agencies had been independently exploiting and disseminating signals and information for which they had been assigned primary responsibility to build ship tracks, while the highest quality tracks were generated by all source processes from multiple agencies. These agencies have been involved in planning efforts to create an integrated national ship tracking capability to deliver the persistent monitoring specified in the MDA CONOPS. A planning meeting for Joint Worldwide Ship Tracking and Dissemination was held in Denver Colorado on 21-22 April 2009. Key agencies contributing to ship track generation were present, as well as U.S. Coast Guard and U.S. Navy (USN) consumers of track information and agencies responsible for the networks that move track data from producers to customers. Agreement was reached on a method for generating true worldwide all-source ship tracks and disseminating them to USCG and USN customers on the Integrated Broadcast System Service network in a format that can be readily absorbed in current operational track display and management systems. The consensus was enabled by a commitment between key track production agencies to form a partnership for a new integrated capability which will be called the National All-Source Fusion Ship Tracking Service.

Engagement on Synthetic Aperture Radar (SAR) employment in support of MDA. ADDNI/GMAII collaborated with the U.S. Air Force Space and Missile Command, NRO and National Geospatial-Intelligence Agency (NGA) technical assessment of a commercial SAR satellite from the RADARSAT II platform for possible use in maritime and air domain awareness. ADDNI/GMAII's Chief Technology Officer (CTO) gathered requirements from the National Oceanic and Atmospheric Administration (NOAA), U.S. Marine Corps, U.S. Coast Guard, and other GMCOI stakeholders, to test the applicability of RADARSAT II. The CTO and staff also facilitated briefings of the effort to the Deputy Director of National Intelligence for Plans, Policy and Requirements' (DDNI/PPR) Intelligence Community Requirements (ICR) office which is responsible for analyzing and planning for future intelligence requirements. ICR set up numerous meetings with RADARSAT II administrators do discuss possible future employment of the technology.

Air:

[88] See *Ship Tracking Senior Advisory Group (SAG)*. (p C-2).

Engagement of the Interagency Implementation Working Group (IIWG). ADDNI/GMAII ensured representation of ODNI and IC equities on the IIWG and supported coordination, execution, and oversight of 112 Interagency implementation actions contained in the NSAS and its seven supporting plans. ADDNI/GMAII actions included:

- Completion of 15 actions for the ADSII Plan including Interagency implementation plans for Enhanced Surveillance Coverage (ADSII-102) and Surveillance Data Integration (ADSII-103), which provided a collaborative roadmap to integrate surveillance capabilities and enhance information sharing.
- Completion of 96 Interagency actions associated with the five other NSAS supporting plans including the Aviation Transportation System Recovery Implementation Plans, MANPADS Threat Response and Recovery Concept Plan (CONPLAN), National Security Special Event Implementation Plan, and the Aviation Operational Threat Response Protocols.

Network Enabled Operations (NEO) Spiral One Plus Phase A Planning. ADDNI/GMAII is inputting to NEO Spiral One Plus Phase A planning to develop Interagency requirements for a planning effort, led by the FAA and JPDO for the NGATS, to define NEO Spiral Two. This effort included stakeholders from across the Federal government including DoD, DHS, FAA and Interagency partners to assist with aviation security and air operation methodologies. ADDNI/GMAII continues to support the NEO Spiral Two efforts of the JPDO and FAA in completing both a CONOPS and an Enterprise Architecture, scheduled for completion in late 2009.

Support to IC Network Enterprise Architecture Initiatives in the Air Domain. ADDNI/GMAII enabled integration of network automation systems for enhanced sharing of flight data, air surveillance data, and regulatory, law enforcement, and intelligence information to better satisfy aviation security requirements.

Strategic Objective 3: *Build global communities of interest for all-source intelligence integration in the maritime and air domains to develop familiarity, leverage partnerships and facilitate concerted teamwork that is marshaled against the challenge.*

DNI Intelligence Science Board (ISB).[89] ADDNI/GMAII private sector outreach planning benefited from ISB findings in its December 2008 study "Integrating Private Sector Information into Intelligence Community Activities." The report highlighted a "partnership gap" that exists between the government and private sector due to a lack of trust from industry (in government protection of sensitive/proprietary information and sources); a lack of confidence between both parties (regarding potentially self-serving motivations); and a long-standing record of lack of responsiveness from government to industry that included a lack of feedback on the value of industry input when the private sector has cooperated. The overarching conclusion, that included direct feedback from senior industry leaders, was that non-government entities will only deal with the executive level of government when it comes to requests for sensitive cooperation.[90]

[89] The mission of the ISB "to provide the IC with outside expert advice and unconventional thinking, early notice of advances in science and technology, insight into new applications of existing technology, and special studies that require skills or organizational approaches not resident within the IC." ISB. *Integrating Private Sector Information into Intelligence Community Activities.* December, 2008. (p 2).

[90] "Many senior executives insist that they will only work with one trusted U.S. Government (USG) person. This means that individuals acting as trusted brokers for the USG must have longevity built into their positions, rather than

Maritime:

Global Maritime Intelligence Integration Conferences. The Office of Naval Intelligence (ONI) conducted two GMII conferences subsequent to the stand-up of its GMII Threat Working Group (TWG) in September 2005. The TWG, which meets quarterly, has included representation from across the IC and Interagency, and our Commonwealth Allies (Australia, Canada and the United Kingdom). They have been well represented in this process and played a major role at both conferences. The first annual GMII conference, held in March 2007, identified common threats and challenges in the maritime domain. The second, held in March 2008, focused on how the GMCOI can come together to collectively work to identify, mitigate and defeat maritime threats and challenges. The latter also highlighted initiatives to improve Interagency collaboration; identified analytic gaps within the GMCOI and showcased emerging capabilities for conducting intelligence collection, analysis, integration and dissemination of maritime-related intelligence. A direct outcome of the March 2008 conference was the requirement for a collaborative capability between Commonwealth partners and the U.S. Recognizing the need for an immediate solution, ADDNI/GMAII, ONI and the Defense Intelligence Agency (DIA) established an interim capability based on Microsoft SharePoint, available to all aforementioned Commonwealth partners. This action provided them with the first-ever ability to browse content posted for review and comment by U.S. personnel. This capability was established as a bridge to a fully collaborative enterprise-wide solution being developed by the ODNI that will create direct inter-Commonwealth and U.S. analyst collaboration.

Global Maritime Community of Interest Summits. ADDNI/GMAII conducted two GMCOI summits in 2007 (one for IC stakeholders and a subsequent event that included the Interagency, law enforcement and private sector) to create an awareness of GMII and develop opportunities for Interagency collaboration and partnerships to enable improved information sharing on activities and threats in the maritime domain. These meetings also began an inclusive process of leveraging results of the Maritime Baseline Assessment into recommendations for changes to authorities, responsibilities, programs, etc., necessary to implement the GMII Plan. Results of the gatherings included a Plan of Action and Milestones (POA&M) and direct stakeholder input to the drafting of Intelligence Community Directive (ICD) 902, Global Maritime and Air Intelligence Integration.

Protection of the Global Supply Chain (GSC) Conferences. ADDNI/GMAII efforts to reach out to the maritime industry included two ODNI sponsored conferences that engaged the private sector on the actions necessary to adequately protect the GSC from terrorist and illicit activity. The conferences also solicited industry's feedback on ways to improve the level of cooperation on security issues between the USG and businesses involved in maritime commerce. Conference attendees included corporate leadership, domestic and international security firms, and representatives of the IC and federal government that deal with the maritime domain.

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being subject to the typical USG job rotations…"*Individual trust* is rooted in the relationship between two individuals. Individual trust provides the optimal mechanism for immediate, strategic, crisis response. Institutionalized trust takes too long to move a request for information through the institution's channels, both in the USG and the private sector, whereas individual trust can rapidly access intimate insight and information via sensitive trusted relationships. Many private sector executives say they will only deal with one USG point of contact, and that point of contact must report directly to the President of the United States or the Vice President. They justify their requirement for the level of access by the sensitivity of the information being passed and of the source passing the information. If either becomes common knowledge, operational risk to the company will increase and shareholders or investors will lose confidence in the company." ISB. *Integrating Private Sector Information into Intelligence Community Activities.* December, 2008. (pp 14-15).

The first event challenged industry experts to visualize a concept of the GSC in 2032 and to better understand how the USG can contribute to its security and reliability. The second solicited ideas on how to quickly achieve worldwide maritime suspicious incident and threat warning information sharing.[91] This included a related overview of existing information exchange entities such as Information Sharing and Analysis Centers (ISACs) and the Department of State's Overseas Security Advisory Council (OSAC) to determine the utility of each for threat reporting purposes.

Although the second conference was focused on improved communication, much of the discussion centered on the increasing vulnerability of the GSC and the potential economic impact of a serious disruption. There were four predominant themes from speakers, panel members, and working groups:

- Bad actors can seriously affect whole economies by stopping a single node in the GSC, e.g., information, fuel, chemicals, food, products, components, money, etc.
- An attack on the GSC, whether kinetic, radiologic or cyber, is likely and could have significant effects on the U.S. and global economy. There would be serious economic disruptions at the very least, as there is a lack of capacity for supplies to be rerouted.
- As complete defense is unattainable, infrastructure resiliency is critically important and should be combined with best security practices.
- Security communication between the USG and maritime industry can be improved, with strong preference for a single point of contact within the USG for maritime suspicious incident reporting and issuance of threat warning. This applies to state and local governments as well.

Results of the conferences included:

- Derived maritime industry's collective expertise while affording its leaders an opportunity to input to USG policy making and infrastructure development.
- Direct one-on-one follow-on interaction between ODNI and maritime industry leadership to build trust and institutionalize lines of communication.
- A clear industry preference to utilize DOS' OSAC for threat communications instead of the creation of a fee-based maritime specific ISAC.
- All input received and lessons learned were employed at the follow-on OGMSA Global Maritime Information Sharing Symposiums (GMISS)[92] held in August 2008 and September 2009 to continue development of improved receipt of industry threat tipper information and USG threat warning dissemination.

NMIC Counter-Piracy Conference. The ODNI's NMIC, in coordination with the National Intelligence Council, held a conference on Piracy in the Horn of Africa from 7-9 April 2009 in Suitland, MD. The conference drew more that 280 attendees, including naval and defense attaches from 20 countries, Interagency representatives from 21 organizations, operations and intelligence analysts from 25 military commands, academic experts from three universities, representatives from the maritime shipping industry, and a representative from the United Nation's World Food Program. Topics discussed included case studies; pirate tactics, techniques and procedures; and private sector,

[91] These events were part of a series of workshops initiated by the ODNI and two private sector partners: the U.S. Chamber of Commerce and the Intelligence and National Security Alliance (INSA) designed to solicit public feedback toward assessment and improvement of the IC's level of collaboration.
[92] See footnote 78.

foreign partner and non-government organization requirements. The event further integrated the GMCOI by providing a forum for unprecedented sharing of information to identify and close counter-piracy gaps and seams.

Proliferation Security Initiative (PSI) Support. The PSI is a global voluntary effort that aims to stop the trafficking of Weapons of Mass Destruction (WMD), their delivery systems, and related materials to and from states and non-state actors of proliferation concern. Because PSI related cooperative interdiction activities are information-driven, ADDNI/GMAII intelligence integration actions contributed to improved MDA that directly supports PSI mission objectives including international outreach.

Air:

Collaborative Support of Interagency Air Surveillance Summits (IASS). ADDNI/GMAII supported planning and execution of two Interagency Air Surveillance Summits, gathering together department/agency stakeholders to consider recommendations on initiatives to improve air surveillance integration. These efforts enabled identification of common data standards and architecture that will contribute to the integration of ADA surveillance and intelligence. Specific actions included:

- Enabled stakeholder Principals to reach agreement on an Interagency air surveillance governance structure and a way ahead plan for implementation of actions to guide and facilitate integration of air surveillance capabilities.
- Facilitated a formal invitation by the Secretary of Transportation to include the DNI in the governance structure to enable integration of surveillance with intelligence capabilities.
- Represented the IC in Interagency planning for development of an air surveillance CONOPS and an Enterprise Architecture effort.

A third IASS is planned for January 2010 that will expand the topic from just air surveillance to ADA through the incorporation of intelligence and law enforcement equities and participation.

Strategic Objective 4: *Integrate maritime and air intelligence/information sharing throughout the communities of interest, and ensure rapid and effective dissemination of intelligence to provide decision advantage to leadership and deepen understanding at all levels and departments of government.*

Exploration of Reserve Intelligence Program Support to Interagency Partners. ADDNI/GMAII engaged Joint Reserve Intelligence Program (JRIP)[93] leadership to explore JRIP capabilities and initiatives that could potentially support Interagency maritime and air domain intelligence efforts at Joint Reserve Intelligence Centers (JRICs) throughout the U.S. Since the JRIC sites are separate from state and local intelligence fusion centers, they could complement fusion center efforts to enhance intelligence integration and information sharing among federal, state and local partners, with an associated benefit to air and maritime domain intelligence integration capabilities.

Maritime:

[93] The JRIP manages 28 JRIC sites located in densely populated areas across the U.S. that could provide classified and unclassified network access to support intelligence distribution, crisis response, National Special Security Events, exercises and potential continuity of operations (COOP) requirements for many users including the military, National Guard and appropriately cleared Interagency partners—functions that they perform today on a smaller scale.

Completion of a Maritime Baseline Study. Section V of the GMII Plan (see Annex B) required the Director, GMII to "conduct a baseline, community-wide assessment of capabilities that support the GMCOI to ensure alignment of customer requirements with community information access plans, relationships between entities within the GMCOI intelligence enterprise, and collection programs and analytical production…" The "Initial Baseline Assessment of the State of the Global Maritime Community of Interest", completed in August 2007, identified many impediments to information sharing such as the lack of a national level MDA architecture or common technical/data standards within the GMCOI. It also validated existing and programmed resources and capabilities. The following are specific results and recommendations produced in the maritime report:

- Unacceptable Risk of Failure. Gaps and seams in roles, responsibilities, technologies, processes and policies across the federal government and beyond leave *an unacceptable risk of failure to recognize and/or provide important information and intelligence to those who need it in time to act.*
- Lack of Governance. Overarching governance, policy, and processes do not exist to ensure that the various GMCOI entities communicate and work toward a shared set of objectives.
- Sharing Roadblocks. The GMCOI must operate with the fewest possible information sharing impediments or restrictions. Unless steps are taken to address these gaps, *a failure to "connect the maritime dots" could occur at any time.*
- Maritime Network Analysis. Maritime intelligence activities do not easily fit into existing IC constructs such as the National Intelligence Priorities Framework (NIPF). Likewise, they do not easily break down into tasks that can be labeled national-level, operational level or tactical intelligence; and they do not fit well with the IC's traditional business processes or organizations.
- Lack of Fused Analysis. The GMCOI lacks a strategic all-source information and intelligence analysis focus spanning the spectrum of threats in the maritime domain. The composition of the GMCOI remains undefined and no common processes or procedures exist for ensuring that information is fused and provided in time to those who need it to make decisions or take action.
- Lack of Specific Mission Focus. GMCOI organizations currently focus on specific mission areas such as counter-narcotics, counter-terrorism, or counter-proliferation. While these mission areas of expertise overlap in the maritime environment, no agency or entity is currently resourced or mandated to develop the maritime supply chain expertise necessary to examine how the illicit and legitimate trafficking/transportation networks are used by adversaries.
- Lack of Coordinated Effort. GMCOI authorities and responsibilities overlap with regard to gathering, analyzing, producing and acting upon maritime related information and intelligence. The GMII Plan[94] identifies the major organizational entities of the GMCOI, yet the simple identification of the correct points of contact for maritime activities posed a challenge to the assessment effort. Because so much of the information critical to our understanding of the maritime environment is in the hands of the law enforcement and private sector communities, GMII cannot be limited to traditional IC activities. Understanding the entire maritime information space demands an all-source approach and requires support and cooperation across U.S. and foreign governments, as well as the private sector. Organizations within the law en-

[94] The GMII Plan uses existing capabilities to integrate all available intelligence regarding potential threats to U.S. interests in the Maritime Domain.

forcement, diplomatic, policy and regulatory communities have essential maritime domain knowledge and must be full partners in the GMII information sharing effort.

- Difficulties Involved in Exerting Influence Beyond the IC. Due to its position within the ODNI, many GMCOI members doubted the ADDNI/GMAII's ability to exert effective influence and leadership across such a broad array of constituencies beyond the IC, despite almost universal agreement that such work needs to be done.

Lessons Learned from the Maritime Operational Threat Response (MOTR)[95] *War Game.* Representatives from the ADDNI/GMAII, NCTC, NCPC, ONI and ICC provided IC support to the June 2008 MOTR War Game held at the Naval War College, Newport, RI. ADDNI/GMAII promoted the concept of an ODNI NMIC for fully integrated IC support to MOTR related activities. Lessons learned from the event supported NIAWG efforts to define ODNI NMIC roles and responsibilities to align its framework for optimal MOTR support.

IC Input to the MDA Joint Integration Concept Working Group. ADDNI/GMAII assisted in the development of a DoD Joint Integration Concept designed to integrate existing Joint Operating Concepts and Joint Functional Concepts intending to further define and integrate MDA capabilities and requirements within a DoD staff construct.

National MDA Interagency Investment Strategy (IAIS).[96] Sponsored by the MSPCC[97] in response to tasking outlined in the National Plan to Achieve MDA, and published in May 2007 when the Global Maritime and Air Intelligence Integration (GMAII) staff was being developed, the MDA IAIS provides material and non-material recommendations at the federal department level to achieve a coordinated national MDA capability. Using a process based on the DoD Joint Capabilities Integration and Development System (JCIDS) adapted to suit a larger Interagency effort, the IAIS is one of the first investment strategies to span the Interagency community.

The MDA IAIS development team identified and assessed 74 MDA capability gaps, and designated 15 of them for Tier 1 (leading and most severe) status in four capability areas: 1). Management; 2). Collection; 3). Fusion/Analysis; and 4). Net-Centric Dissemination. The 15 Tier I tasks are addressed in detail in the MDA IAIS. Although not resulting in a traditional investment strategy with developed cost estimates, the IAIS provides a framework and manageable scope for identifying and performing a focused analysis of the Tier 1 tasks to inform individual department investments.

As co-Chair of the MDA SHB and ESC, ADDNI/GMAII shepherded formal recognition of the MDA IAIS as a key document in solving the most important MDA challenges. Since MDA requires a broad spectrum of intelligence and non-intelligence efforts, two existing formal review processes were pursued: 1) the IC Mission Requirements Board (MRB), and 2) the DoD JCIDS process.

In September 2008, the IC MRB reviewed the documents supporting the MDA IAIS and approved the intelligence gaps and shortfalls that they contained. The MRB directed that the MDA

[95] The MOTR Plan (October, 2006) is one of eight supporting plans of the National Strategy for Maritime Security. It aims for coordinated USG response to threats against the U.S. and its interests in the Maritime Domain by establishing roles and responsibilities, which enable the government to respond quickly and decisively.
[96] The National MDA IAIS is one of two products developed in response to tasking outlined in the National Plan to Achieve MDA. The companion product is the National CONOPS for MDA.
[97] The MSPCC was renamed the Maritime Security Interagency Policy Committee (MSIPC) in February, 2009.

IAIS shall substitute for a Joint Capabilities Document (JCD) within the IC to be referenced in subsequent requirements documents. The MRB also recognized MDA as an excellent example of a mission that requires integrated mission management, collection, analysis and information sharing strategies, since no single intelligence provider or agency can provide the capabilities needed to maintain situational awareness and provide timely warning to operational forces deployed worldwide.

Designated in June 2008 as the DoD Executive Agent for MDA, the Department of the Navy refocused the contents of an MDA IAIS supporting precursor document, (the January 2007 MDA Interagency Capabilities Documents (IACD)), to emphasize those aspects within DoD purview. The modified October 2008 MDA IACD was presented to the DoD Battlespace Awareness Functional Capabilities Board (BA FCB) in February 2009, beginning its journey through the JCIDS process, with eventual approval by the Joint Requirements Oversight Council (JROC) for future investments.

Following the February, 2009 BA FCB recommendation, the Joint Capabilities Board (JCB) approved development of a JCB memorandum to the JROC endorsing the MDA IACD critical capability gaps and recommending Service and Combatant Command participation in an MDA Interagency Solutions Analysis (IASA), similar to a JCIDS Functional Solutions Analysis (FSA), to identify government-wide solutions and respective organizational responsibilities that collectively respond to the capability gaps. The MDA IASA Core Team includes DoD, Homeland Security and Transportation MDA Executive Agents, U.S. Northern and Pacific Commands, and the ADDNI/GMAII and OGMSA staffs, supported by the MDA ESC and Stakeholder Board members.

Intelligence Collection Architecture.[98] The ADDNI/GMAII championed MDA mission requirements in the ICA process, which included input to the Geospatial Intelligence (GEOINT) Balance Needs Working Group to formulate criteria and address the IC's mission needs for radar modeling and simulation related to maritime intelligence requirements. This process addressed open-source surveillance against non-cooperative targets while also evaluating the effectiveness of different sensor combinations. The ADDNI/GMAII and D/GMSA jointly submitted a letter expressing maritime radar requirements (in addition to requirements submitted separately by the Navy and Marine Corps), which were partly incorporated into the final report. Later, when the GEOINT Balance Needs Working Group was subsequently asked to coordinate input on electro-optical (EO) national systems for a report to Congress, ADDNI/GMAII facilitated the participation of DIA and DHS I&A thereby providing a collaborative and more comprehensive response. Through its participation in these efforts, ADDNI/GMAII successfully defended the importance of MDA as a separately recognized mission area under the ICA acquisition process for next generation space radar assets.

Leveraged a Foreign Exercise to Improve International Interoperability. Upon request from DHS' Science and Technology (S&T) Directorate, ADDNI/GMAII collaborated with the Swedish government during its MDA Exercise (Nordic Vigilance) to explore and identify opportunities for increased information sharing and technology exchange between the U.S. and Swedish governments. More than 80 Swedish and American participants met in Gutenberg Sweden representing the

[98] The ICA is a new joint ODNI/DoD decision support activity (initiated in June 2008) that assesses proposed intelligence collection architectures and programs from an integrated mission-focused perspective to improve the overall performance of the intelligence enterprise. It evaluates and recommends to the DNI and Secretary of Defence (SECDEF) those intelligence tasking, collection, processing, exploitation, and dissemination capabilities to be added or strengthened, and those to be diminished or redirected. The ICA specifically evaluates activities that lead to integrated operations and effective/efficient use of intelligence capabilities.

GMCOI that included law enforcement, coast guard, customs, defense, intelligence and maritime industry members. Among the lessons learned was that although Swedish and American laws, governance and maritime capabilities differ, the data requirements to detect, analyze and act against maritime threats were very similar. This finding will be used to further engagement of foreign partners.

Air:

Supported a DHS/TSA Air Baseline Study. In response to an NSAS-specified task, ADDNI/GMAII provided substantive support to a DHS and Transportation Security Administration (TSA)-led effort to complete an initial Interagency assessment of the "adequacy" of intelligence information in the air domain community. The following are the four key findings of the 2007 assessment which helped identify the framework necessary for improved information sharing:

- All-Source Construct. There is Interagency interest to develop/formalize an all-source analytic capability to assimilate information from across the Interagency to assess threats to U.S. interests and to disseminate reporting in support of USG decision-making and operational requirements. Since there is no one department or agency with the global focus, capability, resources and expertise to support this requirement, an Interagency integrated intelligence solution is essential.
- Governance and Authorities. Coordination and oversight of Interagency partners is needed to facilitate effective information sharing and intelligence-surveillance integration. This will in turn dissolve stove-piped operations and improve USG-wide analytic capabilities to enhance air domain security.
- Information Sharing. Information sharing is negatively impacted by data over-classification, lack of standardization (policy, lexicon, and technology), cultural mindsets, and information sharing boundaries between the intelligence and law enforcement communities. As a result, collaboration is restricted.
- Education and Training. The interdependency of Interagency operations necessitates development of community training programs to develop critical analytic skill sets and provide awareness of Interagency partner missions, requirements, and relationships to enable effective, collaborative mission support.

ODNI Air Baseline Follow-On Study. The ADDNI/GMAII Air Team built upon the DHS/TSA effort of 2007 by conducting an interagency baseline assessment to specifically identify the "As Is" of intelligence integration and information sharing. The goal was to inform decisions toward a "To Be" of an integrated intelligence capability that will improve aviation security for the U.S. and its interests worldwide. The more comprehensive baseline was completed in September 2009 under the direction and oversight of the Interagency AII-SSG with engagement by the National Security Council, and the active participation of over 60 federal air domain stakeholders. The ODNI baseline was designed to better guide Interagency intelligence integration planning and implementation activities.

Support for U.S. Air Force (USAF) Air Domain Awareness Capabilities Based Assessment (CBA). ADDNI/GMAII assisted the USAF A2 in the planning and preparation for a proposed ADA CBA to identify mission requirements and stakeholder capabilities, determine gaps, and recommend necessary solutions to satisfy the requirements in support of Interagency ADA. ADDNI/GMAII also

coordinated and deconflicted activities with the Air Force Intelligence Analysis Agency's (AFIAA) Sudden Spirit program.[99]

Collaborative Effort to Develop an Air Security Working Group (ASWG). ADDNI/GMAII worked with Interagency partners to gain agreement on an Interagency framework (governance body) to resolve policy, requirements and investment strategy issues and recommendations to synchronize and deconflict Interagency surveillance initiatives and responsibilities. The efforts of the ASWG resulted in the successful planning and execution of the Interagency Surveillance Summits, which lead to the JPDO SPC initiative to integrate air surveillance capabilities. Although the resulting SPC surveillance governance structure is not a direct IC requirement, it facilitates improved integration of surveillance capabilities, investment, and information sharing architecture that will eventually enable IC agencies to connect with the operational community for sharing collection and analytic capabilities.

Support of the MITRE Corporation's Center for Advanced Aviation Systems Development (CAASD).[100] ADDNI/GMAII assisted the MITRE corporation in ensuring IC equities were considered in planning for a *Collaborative Experimentation Environment (CEE)* Net-Centric Experiment (NETEX) that focused on collaboration among agencies with mission responsibilities in aviation security and incident response and recovery. This NETEX advanced developmental efforts focused on pre-flight threat identification and assessment; in-flight security coordination; and incident response.

Collaboration with a North American Aerospace Defense Command (NORAD) Interagency Tiger Team. ADDNI/GMAII assisted NORAD with development and enhancement of Interagency collaboration on airspace surveillance detection, tracking and analytical capabilities to better support aviation security and Homeland defense requirements.

Support for Standup of the National Security Agency's Global Air Analysis Support Team (GAAST). ADDNI/GMAII successfully advocated for collaborative funding initiatives with the NCPC and the Defense Threat Reduction Agency (DTRA) that resulted in provision of over $500K in FY 2009 funds to support standup of NSA's GAAST analytic capability. ADDNI/GMAII also facilitated completion of documentation for GAAST to receive mission authorization to conduct intelligence mission support and achieve Initial Operating Capability.

Strategic Objective 5: *Enable IC members to quickly eliminate critical gaps and enhance enterprise agility.*

Maritime:

Maritime National Human Intelligence (HUMINT) Collection Directive (NHCD). ADDNI/GMAII initiated collaboration with the National HUMINT Requirements Tasking Center (NHRTC) to develop the first-ever maritime NHCD. ADDNI/GMAII developed the initial draft and assisted NHRTC in its review, further helping to identify SMEs for targeted interviews to refine the NHCD. Establishment of a maritime NHCD will better focus HUMINT resources to provide the tipper information necessary to more efficiently and effectively target other intelligence collection resources and operational surveillance assets.

[99] See footnote 49.

[100] MITRE CAASD's CEE is a reconfigurable laboratory that includes operational and emulated systems, simulations and applications. It can be used to conduct exercises that quantify multi-agency mission effectiveness.

Transference of Operational Maritime Intelligence Integration from ODNI Staff to the NMIC. Eight positions were transferred from ODNI management control to the NMIC after the latter's stand-up to shift the mission management aspect of maritime intelligence integration to the new functional entity.

Air:

Air NHCD. ADDNI/GMAII also initiated collaboration with NHRTC to develop the first-ever air NHCD. ADDNI/GMAII developed the initial draft and assisted NHRTC in its review, further helping to identify SMEs for targeted interviews to refine the NHCD. Establishment of an air NHCD will better focus HUMINT resources to provide the tipper information necessary to more efficiently and effectively target other intelligence collection resources and operational surveillance assets.

Interagency Man Portable Air Defense System Working Group. ADDNI/GMAII collaborated with Interagency partners to develop Indications and Warning (I&W) criteria on MANPADS threats in the U.S. for inclusion in the MANPADS Threat Response and Recovery CONPLAN.

Establishment of an Interagency Aircraft Look-Out List. ADDNI/GMAII facilitated the development of a first-ever consolidated Interagency look-out list repository for suspect aircraft to enable improved awareness and collaboration between federal, state, local, tribal and foreign partners engaged in analysis and interdiction of aircraft and personnel associated with illicit trafficking activity.

Interagency Airspace Protection Working Group (IAPWG). ADDNI/GMAII provided IC support and visibility to the IAPWG in furtherance of border and National Capital Region (NCR) coordination issues. It did so by maintaining situational awareness of current air domain threats and through participation in Interagency analytic working groups and collaboration effort to ensure ODNI leadership had visibility on threat issues of concern to IAPWG and other air domain stakeholders.

Strategic Objective 6: *Assess the process and make policy adjustments if necessary to ensure achievement of goals and objectives.*

Intelligence Community Directive (ICD) 902, Global Maritime and Air Intelligence Integration. Following initial development, drafting and IC-wide adjudication during 2008, ICD 902 was promulgated on January 14th, 2009. It codified roles and responsibilities, and provides clear direction to the IC for the efficient and effective integration of intelligence activities related to the maritime, air and intermodal domains. The directive greatly advances IC efforts to overcome institutional and systemic barriers through national-level policy and guidance to enable rapid information sharing for improved support of senior policy and operational decision-makers. The ICD directs maritime and air IC stakeholders to aggressively collaborate and share information proactively to anticipate threats to U.S. interests worldwide, thus facilitating their early identification and mitigation.

Intelligence Community Directive 501, Discovery and Dissemination or Retrieval of Information within the Intelligence Community. ICD 501 was promulgated on January 21, 2009 (see Annex B). It complements and supports the objectives of ICD 902, and has significant implications for information sharing within the IC and within the greater GMCOI and GADCOI. It distinguishes between "discovery" of information (awareness that information exists) and "dissemination or retrieval" (obtaining) the content of the information; establishes information "stewards" who have the "re-

sponsibility to provide" information (make it discoverable); and establishes review boards within IC elements to resolve information access disputes.

Incorporation of Maritime and Air Intelligence Enterprise Equities into ODNI Business Processes. ADDNI/GMAII established and consistently advocated maritime and air intelligence mission requirements to ensure their consideration during ODNI activities and policy development. These efforts included:

- Input maritime and air equities to both the Executive Order (E.O.) 12333 review and to the Attorney General Guidelines for U.S. Persons Controls to enable better information sharing while ensuring the protection of civil liberties.
- Advocating maritime and air intelligence requirements to DNI Analytic Mission Management to ensure integration of those missions into the NIPF process. Also, developed updated language for NIPF documentation on aviation security to better capture aviation security collection requirements.
- Ensured maritime and air intelligence equities were integrated into the ODNI Strategic Enterprise Management (SEM) programmatic process, (including input to FY 2011-2015 resource allocation guidance) through ADDNI/GMAII membership on the Capabilities Programming Guidance (CPG) Committee and the Capabilities Programming Guidance Working Group (CPGWG).
    - Prevented realignment of $56 million in essential FY 2009-2014 funding that would have eliminated the only national analytic ability to provide intelligence in support of operations to detect, disrupt and deter terrorist links to both legitimate and illicit maritime networks.
    - Provided substantial input to the programmatic decision to retain critical National Technical Means assets in support of maritime intelligence collection.
- Input to ODNI/Future Capabilities (FC) to apply "rebalancing methodology" to MDA. ADDNI/GMAII worked with ODNI/FC on project scope, a timeline and terms of reference.
- Input to the National Intelligence Coordination Center (NIC-C) baseline assessment on Intelligence, Surveillance and Reconnaissance (ISR) sensor capabilities and information flow to support potential homeland security requirements that will enable deconfliction and efficient allocation of national intelligence systems during crises.
- Support for NIC-C coordination and recommendation of Interagency air ISR capabilities to support Executive Branch counter-narcotics initiatives targeting of major drug trafficking leadership figures.
- Coordination with the National Intelligence Council for assessment of terrorist threats against proposed commercial aviation activity in combat zones to support Interagency planning activities and policy decision-making.
- Provision of support to draft and coordinate the JPDO ISST report to advise Congress and the Executive Branch on surveillance challenges and recommend Interagency collaborative efforts to plan and implement an integrated surveillance capability for the USG. The report concluded that an Interagency governance mechanism is needed to effectively integrate surveillance requirements, planning and investment, which parallels previous Interagency surveillance documents.

Engagement of the ODNI Multi-Intelligence Working Group (MINTWG).[101] ADDNI/GMAII advocated IC and Interagency maritime and air stakeholder submissions to the MINTWG to leverage its funding of transformational experiments and demonstrations that advance multi-intelligence collection/analytic capabilities and collaboration. Associated efforts included:

- Established ADDNI/GMAII as an associate member of the MINTWG Board and successfully inserted air/maritime domain integration as selection criteria.
- Developed a mechanism to coordinate with the PDDNI, DHS I&A and DHS S&T for funding to support additional MINTWG concepts having significant collection and analytic value in the air and maritime domains.

[101] The ODNI MINTWG solicits, assesses, and competitively selects IC experimental intelligence concepts and awards $5 million annually to programs that substantively improve collection and analysis. The FY 2010 MINTWG theme is "solving the challenges of emerging global issues in our transforming world."

ANNEX A

ANNEX B

ANNEX C

ANNEX D