



**2010**  
**Global Maritime Information**  
**Sharing Symposium (GMISS)**  
**Proceedings**

*Charting  
the Course  
for MDA*





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## I. Foreword



On behalf of the National Maritime Domain Awareness Coordination Office and our partner agencies and organizations, I am pleased to present this summary report of the third annual Global Maritime Information Sharing Symposium (GMISS) to the global maritime community of interest.

This year's successful Symposium had two themes around which presentations and discussions centered: Partnering with Industry in Charting the Course for Maritime Domain Awareness (MDA), and viewing MDA as a Customer-Supplier relationship. Over 40 speakers, presenters, and panelists updated more than 250 attendees on progress in MDA, impediments to that effort, and opportunities for even greater progress. The result was an excellent interchange of ideas, precisely what the Symposium had hoped to achieve.

Several overarching issues emerged from this year's Symposium that we hope to address throughout the year, and use as initial agenda placeholders for the 2011 GMISS. They include:

- Industry feels that their involvement in MDA is more perfunctory than tangible. Representatives from all sectors present expressed strong support for a meaningful two way dialogue and acceleration in implementing effective information sharing systems and protocols.
- Industry representatives expressed the appearance of limited progress in MDA. While the two European prototypes discussed (in the Mediterranean and the Baltic) and the expansion of port level fusion centers/ information exchanges in the U. S. are an encouraging trend, in general there seemed to be little coordination or correlation of the vast amount of data being supplied to government maritime agencies.
- The commercial sector was uncomfortable with the lack of a well defined U. S. and global strategy for MDA and inconsistent coordination of supporting programs both in and out of government.
- Many participants urged that a global approach should be pursued to coordinate and export the successful MDA/information exchange solutions now being evaluated. Attendees broadly supported a global information exchange along the lines of a stock exchange model, accessible by all members of the maritime community at appropriate levels of clearance.
- Today's emerging technologies should be vigorously explored as vehicles for efficient information sharing. The breadth of internet based data coupled with cloud computing concepts and new social networking could be leveraged to provide ready access to timely, accurate information on all aspects of the maritime sector – from market conditions to security.
- Industry candidly expressed their opinions on the inadequacy of meaningful incentives to participate in significant information sharing with government. Alternatively they pointed out examples of what they consider to be disincentives to exchange data: loss of market advantage, compromise of proprietary or trade sensitive data, increased regulatory scrutiny, and the potential for litigation.

I want to thank our sponsoring organizations: National Maritime Intelligence Center, Department of Justice Community Oriented Policing Services Program, U. S. Coast Guard, U. S. Navy, U. S. Northern Command, and the Maritime Administration, without whose involvement the success of GMISS 2010 would have been diminished.



Most importantly, I would like to thank the attendees of GMISS who took the time to participate actively in the working groups. It is through your efforts that we identify those goals that need to be accomplished to move this critical global initiative forward. I can assure you that we intend to use the results of GMISS 2010 to assist us in that regard.

Thank you again, and we look forward to seeing you at GMISS 2011 next summer.



Gary A. Seffel  
Staff Director  
National Maritime Domain Awareness Coordination Office

## II. Overview



The third annual Global Maritime Information Sharing Symposium (GMISS) was held September 14-16, 2010 in Baltimore, MD at the Hilton Baltimore hotel. The symposium brought together more than 265 participants from the private sector, non-government organizations, and government agencies (both U.S. and international) to collaborate on a global system of maritime information sharing. The goal of this year's Symposium was to promote dialogue among these groups in order to advance the common interests of safety, security, environmental responsibility, and economic prosperity in the maritime domain.

The theme for this year's conference was "Charting the Course for Maritime Domain Awareness (MDA): Partnering with Industry". The theme posited the idea of the MDA stakeholders' relationship as one between a supplier and a customer with the principal commodity being maritime information. With this business-oriented theme, the Symposium discussed the maritime information sharing transactions between the public and the private sectors, identifying gaps while noting successes in global MDA.

GMISS was sponsored by the National Maritime Intelligence Center (NMIC), the Department of Justice Community Oriented Policing Services (COPS) Program, the U.S. Coast Guard, the U.S. Navy, the U.S. Northern Command, and the U.S. Maritime Administration (MARAD) through the coordination of the National Maritime Domain Awareness Coordination Office (NMCO). NMCO works in conjunction with and under the auspices of the U.S. National Maritime Domain Awareness (MDA) Stakeholders Board. This Board reports to the U.S. National Security Council's Maritime Security Interagency Policy Committee (MSIPC). NMCO's purpose is to increase maritime situational awareness through interagency and multi-national information sharing. NMCO supports multiple facets in this approach through policy, outreach and information support.



### III. Background

Presentations, breakout sessions, work group discussions and plenary session panels delved into the many elements that make up MDA and the necessary supporting relationships among and between MDA stakeholders. A hallmark of GMISS is the candid dialogue that occurs between attendees, and the 2010 Symposium was no different. From the presentations and discussions, three broad categories emerged into which issues raised during the Symposium could be described. Those categories were:

- **MDA Governance and Strategy**—the strategic approach to local, regional, national, and international management of MDA. This category includes the underpinnings of treaty, law, regulation, and policy and coordinated public and private stakeholder structure that permits maximum benefit to both customers and suppliers of information.
- **MDA Information Exchange**—the actual dynamics of the customer/supplier transaction. This category includes the enabling technology and its uses to enhance the speed and accuracy of relevant information exchange. It also includes the incentives that lubricate information exchange among and between stakeholders.
- **MDA Collaboration**—the partnerships, domestic, foreign and international, built on trust and generally between the public and private sectors that define the ultimate success or failure in MDA information exchange.

### IV. Summary of Proceedings

#### a. MDA Governance and Strategy

Issues surrounding MDA governance and strategy were at the forefront of discussions at the symposia, as they had been at the previous two GMISS sessions. This symposium, however, introduced important new aspects to the challenges in this area. These were expressed across a spectrum from new strategic approaches to the practical implementation of MDA. The two themes of the Symposium: “Charting the Course for MDA: Partnering with Industry” as the primary theme and “Defining the Customer/Supplier Relationship between MDA Stakeholders” as the secondary theme, provided the backdrop to presenters and attendees to discuss the realities of information sharing strategy and governance.



Many speakers, including the Vice Commandant of the U.S. Coast Guard, VADM Sally Brice-O’Hara, acknowledged the frustration that the collective stakeholders were still charting the same course after nine years. Yet examples of MDA success reinforced to the attendees that the potential existed for the global maritime community to enable and implement these successes more frequently through a framework accepted by the governments of maritime nations and embraced by their private sector stakeholders.

Several presentations emphasized that information exchange is occurring and will greatly expand—whether governments or some private stakeholders participated or not - through a combination of technology utilization and a global thirst for information in the maritime sector. This concept was highlighted at the beginning of the Symposium by the keynote speaker, Mr. Michael Jones, Chief Technology Advocate for Google, Inc. His comments were a strategic warning to the attendees that a sea change in information management was already underway. Designing an MDA governance infrastructure and strategy that did not accommodate the new realities would diminish effectiveness and efficiencies realized by the new paradigm.

Most significant in this new thinking was the concept of expansion of data available for sharing with all stakeholders—the cloud approach, maximizing open source and/or rethinking traditional classification restrictions. Typically data is analyzed by stakeholders and then a determination is made what to share with others. This approach reinforces silos or stovepipes through the belief that information is power and therefore holding that information enhances power. The new model calls for making all data available to stakeholders who then analyze the information needed to support their charters. This approach effectively breaks down the silo effect by reinforcing that power lies with the analyst, not with the holder.

*Knowing what to do with information is power – the differentiator is now not the holder, but the analyzer of the information.*

An encouraging trend is the grass roots employment of MDA. Over 700,000 people are viewing AIS data daily. Ship operators posting reports on conditions at terminals and operating local port information exchange networks are two examples of rapid information dissemination contributing to awareness within the maritime domain. Local and regional level exchanges of information that are supported by social networks and personal relationships have become de facto MDA systems, absent the presence of an overarching strategy and protocols. At U.S. federal government levels, the tactical nature of MDA appears to be prevalent and growing, evidenced by the network established during the Deepwater Horizon oil spill response in the Gulf of Mexico. **The challenge for the attendees, particularly those representing national public sector agencies, was how to create a framework that facilitated tactical information exchange among an expanded number of stakeholders, leading to better information availability, while allowing for strategic information analysis at national and international levels.**

Presentations on regional and multi-national attempts to formalize MDA infrastructure pointed out that insufficient progress had been made to satisfy end users. There was consensus among the attendees that the ongoing regional efforts need to multiply. What remains undecided is the global strategy to knit the various ongoing regional systems together. The methodology to facilitate collaboration between regional MDA systems remains undetermined.

Throughout the Symposium attendees consistently expressed the desire for singular national and international leadership charged with the development of strategic frameworks for the management of MDA. Organizationally, participants suggested that no single entity could or should oversee MDA, and that coordination among select stakeholders was the most promising approach. Attendees suggested the creation of an international broker or administrator of MDA information who would be charged with standardizing information input and output as well as making the information available to appropriate users. While acknowledging the value of global MDA oversight, they noted the difficulty in establishing such a structure. Similarly the concept of an international maritime information exchange, not unlike a stock exchange, was discussed and its difficulty in establishment noted.



Participants also noted the increased complexity that value-added MDA presents, given the realities of global supply chains. Maritime infrastructure threats must be gleaned not only from information provided by vessels, crews, and cargo, but also from shore facilities, intersecting modes of transportation, and, freight forwarders. Several speakers urged MDA utility to move more toward predictive activity to balance its current emphasis on preventive activity, an idea underscored by the Symposium's final speaker, VADM David Dorsett, Deputy Chief of Naval Operations for Information Dominance/Director of Naval Intelligence. He outlined the U.S. Navy's ongoing shift from a platform Navy to an information-centric Navy as a significant move from an adaptive to an anticipatory approach to infrastructure change. VADM Dorsett emphasized that security is dependent on information all stakeholders to develop solutions to sharing information. To accomplish more collective sharing of information, we must see a surge in public/private trust, treating collaboration as a top priority.

### b. MDA Information Exchange



Information exchange dominated this Symposium to a greater extent than in the previous two years. Three highlighted areas support a rethinking of information sharing: 1. MDA supporting technology, 2. emerging requirements to use that technology (AIS and LRIT) and, 3. a dramatic increase in the use and adaptation of the internet by MDA and non-MDA stakeholders. Multiple examples of novel approaches emphasized the risk of irrelevance or non-competitiveness if adaptation and anticipation are not incorporated into MDA processes. However the need to restrict access to some data due to security classification or commercial confidentiality desires will likely remain a continuing issue.

Technology has created a new model in information access. The ability to share information has been vastly expanded by the advent and integration of multiple synergistic platforms: the internet, cellular telephony and data access, global positioning data and satellite-based visual imagery. In the past data was of primary importance when coupled with its subsequent transformation into information. As pointed out in one presentation, the next two steps in the process of making it more useful are to associate the information to create knowledge about a situation and to then analyze it to develop understanding or the "sense" of a situation. It is in these last two steps where significant improvements are needed.

Speed and accessibility have opened new opportunities for information sharing. Explosions in social networking sites, (Facebook/Twitter), instant reporting with attached video and audio files by existing maritime stakeholders or the general public, applications to enhance geographic information systems, and overlays on digital maps are examples of information exchange of value to MDA users. Decisions on structure for an MDA system remain. The need for users to define their information needs as customers was noted as critical both to those who would be information suppliers as well as to entities that might be information brokers.

Several presentations highlighted the expanding access to information from non-traditional sources supported by new capabilities to enhance accessibility. The new "cloud computing" model of data management and utility was strongly supported throughout the conference as a highly effective method for sharing maritime information. A using population of vetted "subscribers" – government and private industry – could have continuous access to desired information through the "cloud".

MDA information exchange is occurring at local levels with some degree of success. This seemed to work best when more focused information was exchanged, usually information that had previously been discussed as valuable to one party or the other. Examples varied from the ports of Norfolk, VA, Honolulu, HI, and Long Beach, CA to various international ports assessed for safety suitability by visiting ship masters. Topical forms or basic networks were developed to support the local information exchange. In some cases personal relationships fostered quick texts or phone calls that fed information needs by the other party. On the federal level, several speakers suggested MARAD's MarView program, employed successfully during Haiti earthquake relief operations, be considered a component of an MDA exchange.

Another common theme centered on how incentives for information suppliers might improve the quality and volume of information to customers. Representatives of the shipping industry expressed frustration that the flow of maritime information is perceived to have been largely one way. U. S. Government emphasis on CSI, 10+2 data, the 24-hour and 96-hour data exchange rules and C-TPAT has created a large flow of data to the government with no corresponding access by industry.

From another perspective, information sharing by industry can be viewed to have negative consequences. It could be sensitive from business aspects, or possibly legally implicating depending on content. Anonymity, protection of trade sensitive information, vetted admission to the information databases and/or the creation of managed information exchanges were among the suggestions made to incent the commercial maritime industry to provide additional data in support of MDA.

*The need to rethink and redefine information exchange was relevant to each attendee.*

Frustrations might also be eased through appropriate incentives to industry. While the issue affects both public and private sector stakeholders, it was articulated most forcefully during the Symposium by private sector participants. Examples included the desire for government sharing of port threat data to shippers to ease their participation requirements in the C-TPAT program. Conversely, government desire for ship locations, now largely accomplished through LRIT and AIS, raised competition concerns among ship operators, afraid that information could be obtained by other operators trading in the same space.

The keynote speaker presented a very striking reality in the form of a currently accessible international maritime information exchange grid, not sanctioned or structured by any government entity. It contains

*Inaction itself is a disincentive to sharing information.*

potentially valuable real-time information, using publicly available internet sites, on individual ports and supply chain components. The accuracy of the information presented appeared, in some cases, better than government documents or sites due to a broader base of participants than those focused on the maritime sector. This expanded participant base also provides a richer level of information that might allow an MDA stakeholder to improve the risk assessment of a particular

aspect of the global supply chain. The value of information exchange is most apparent if something is done with the information. The presenters posed that inaction itself is a disincentive to sharing information.

### c. MDA Collaboration

The third major category of discussion during GMISS was MDA collaboration. Some examples of collaboration enablers were the Marine Safety and Security Information System (MSSIS), the continued growth, interest and concern for GMISS, and the local and regional partnership successes.



Another key point made by the keynote speaker was that “sharing is an amazing enabler.” His recommended approach is to inform, share and adapt. But to be effective at this requires collaboration. In addition to points made in presentations, the working group on Regional & Global Collaborative MDA highlighted two primary aspects that they thought were critical to building an information sharing system and supporting processes. The first, and most important, was trust, built through cooperation, collaboration and coordination. The second was leveraging the positive examples of regional and local information sharing, which could possibly be connected as the basis for a global system, likely under the auspices of an international broker for MDA.

*“Sharing is an amazing enabler.”*

The attendees reached a consensus early in the proceedings that, given the many regional and local examples of successful collaboration, successful principles and lessons learned should be passed along expeditiously. They also felt strongly that regional information sharing is iterative and builds trust through the very process of exchanging information. One regional partnership presented that was representative of this point is the special relationship between Canada and the United States, not only from the standpoint of security but also from an economic perspective. A second overview highlighted the European Union’s two ongoing prototype information exchanges that highlight this point as well. To the participants the connection appeared clear and underscored that security is intertwined with the smooth flow of commerce between nations.

Other successful examples of local and regional collaboration dealt with practical and tactical needs of stakeholders. Overviews presented by the ports of Baltimore, MD, Norfolk, VA and Los Angeles/Long Beach, CA, demonstrated the potential of strategically aligned information systems. These collaborations include unique technology applications, such as the sharing of video from closed circuit television (CCTV) feeds among state agencies facilitated by the development of a transcoder that combines feeds from multiple sources and forwards the result to an IP address accessible by all interested parties. Informal networks simply emerge because the members are interested in the information provided for a wide variety of reasons.



Common enablers stood out from many of the presentations and discussions that permit nations to share the necessary information in a collaborative manner, including:

- Drawing on common interests to provide the impetus for collaboration (democratic values, history, culture, integrated economies, networked multi-modal transportation systems, shared critical infrastructure), and
- Building on current bi-national interagency Vessel of Interest lexicon to explore development of collaborative Watch Lists.

The participants quickly reached a consensus that the MDA Information Sharing Watchwords of “Transparency and Trust” should be emphasized as a necessary foundation for collaboration. There were frequent discussions during the three days regarding perceived actions that violated the trust of one stakeholder group by another. The lack of trust that results from these perceptions is a significant obstacle to meaningful collaboration.



## V. Summary of MIST and previous GMISS findings

CAPT George McCarthy, past Deputy Director of NMCO, shared a summary of the recent progress made by the Maritime Information Sharing Task Force (MIST). He also reviewed the key findings from the first two GMISS symposia as an introduction to the Town Hall meeting that followed. MIST is the local/regional sister effort of GMISS that seeks to capture the uniqueness of our nations ports in terms of information sharing, including:

- What are the local best practices?
- What are the specific challenges?
- Are there national trends in incentives, collaboration and streamlining information sharing activities?

The MIST team has completed this process in the ports of LA/LB, Puget Sound, and Honolulu and is currently working in the Delaware Bay Region. The efforts have been an exemplary collaboration, leveraging local maritime exchanges, law enforcement, fusion centers, the USCG, the Maritime Administration (MARAD), the U.S. Office of Global Maritime and Air Intelligence Integration (GMAII) and Customs and Border Protection (CBP). In an effort to better capture the intermodal aspects of MDA, MIST Delaware Bay will also include industry representation from the rail and trucking industry.

The primary points raised in the 2008 GMISS included:

- Can the government consolidate or coordinate these outreach conferences towards coordinating their message?
- There should be a single point of contact within government for the maritime industry to report suspicious behavior to, while also being able to obtain vital security information in return. Can we not coordinate the exchange of needed information?
- Damage to any portion of the Global Supply Chain can seriously affect whole economies.
- The need for immediate recovery of the Global Supply Chain in the event of damage requires proactive policies in place, and understood, ahead of time.

The following year GMISS 2009 emphasized six key issues:

- We are beginning to create MDA “silos” where vast quantities of information may be available, but not shared.
- There is a need for a mutual understanding of each other’s dynamics.
- There is a tendency towards over-classification.
- There is value in immediate information ahead of vetted information.
- There is a need for a more efficient, better coordinated information flow between parties.
- There is a need to establish models of success from which to expand.

CAPT McCarthy noted that the theme of “Charting the Course for MDA” provided an open forum for industry and government to share ideas for improving the exchange of relevant maritime information and to attack fundamental issues raised in the previous GMISS sessions.



## VI. MDA Town Hall Meeting

The MDA Town Hall Meeting brought together senior officials from the government and the maritime industry to directly address key issues on maritime security and information sharing. The two hour session allowed the panelists to make remarks of their choosing, an open forum for discussion and a closing question and answer period.



Notable from the opening remarks were observations from a number of the panelists summarized below:

- Mr. Dana Goward (DHS) emphasized the MDA goals of enhancing transparency, assuring accurate, dynamic, confident decisions, and facilitating the flow of commerce.
- Mr. Giles Noakes (BIMCO) urged the assembly to find a global solution for information sharing and to encourage the industry's willingness to help.
- Mr. Bruce Stubbs (DOD) gave a military focus to MDA and stressed how MDA can build relationships with our foreign partners. He emphasized that the government coordinating group works well together and is in charge of U. S. MDA government wide.
- Captain Mike Murphy, American Maritime Officers, shared the mariner's "deck plate" perspective, noting that the work load increases associated with MDA make it hard to be forward looking. He cited regional cooperation in the Horn of Africa as a sign of success counter-balanced by denied shore leave to mariners.
- Ms. Beth Gedney, Passenger Vessel Association, reminded the attendees that MDA cannot be solely focused on security, but must be about the facilitation of commerce and other uses-such as passenger safety.

The open forum and Q&A session were lively, wide ranging and open ended with participants suggesting topics as varied as the Executive Order on piracy, the incentives for providing information, and the creation of an information exchange as possible subjects for discussion in the working group sessions. Several noted continuing concerns regarding the visibility and oversight of vessels of fewer than 300 tons (dark targets). RADM Cox (NMIC) pointed to JIATF SOUTH as an example of using lessons learned from its drug tracking experience as a possible solution, but acknowledged there was no quick fix. The IMO was proposed as a body that could provide global facilitation to solve the MDA information sharing challenge. While not reaching any specific recommendations, the town hall meeting set the stage for the working sessions to follow.

## VII. Breakout Sessions

### a. Ocean Law and Policy

The breakout session was kicked off by presentations from Dr. John Oliver, USCG Ocean Policy Advisor on "Marine Spatial Planning" and then followed by Mr. Jack Belcher, Partner, EnergyNorthAmerica on "The Impact on Industry of Marine Spatial Planning & Ocean Policy". The context for these presentations was the underlying rationale for marine spatial planning emerging from the recently issued National Ocean Policy. Dr. Oliver presented the positive results that can occur through de-confliction of the ocean strata among varied competing interests.



The industry's reaction, as presented by Mr. Belcher, noted the pronouncements and perspectives that pose potential economic threats to the maritime industry. For example, Dr. Oliver took issue with the use of the term "maritime zoning" while the first concern of the industry was "maritime zoning" by governmental entities to limit activities.

The third presentation was by Mr. Claude G. Thouret Jr., Chief Operating Officer, Eagle Bulk Shipping, Inc. on "Piracy Policy & the 'Redwing Incident'" reflecting the real world consequences of policy decisions and government directives

on marine operators and the potential exposure to criminal sanctions for U.S. shipping interests under the Executive Order of Piracy currently in force. Additionally, the unilateral action by the United States on Piracy and its concurrent failure to ratify the "Law of the Sea Treaty" was universally viewed by the session participants as undermining its international credibility and its ability to be a persuasive force in the international shipping community.

In both cases, industry representatives voiced frustration over the lack of interactions between "the supplier and customer" in dealing with both an emerging policy issue and a real world one. They also expressed a lack of understanding of the deliberative and decisional processes and their role in those processes and a strong desire to have a 'place at the table' while deliberations were underway. Both Mr. Belcher and Mr. Thouret cited the lack of certainty in government policy and translated that uncertainty into a lack of investment in the industry.



The debate highlighted the broader skepticism within the industry to share information easily with the government for the purpose of enhancing MDA. While an apparently parochial attitude might appear selfish and self-serving, industry has a litany of policies, regulations, orders, etc. that highlight the one-way nature of government actions.

### b. Science and Technology

In the spirit of charting the course forward, the Science and Technology Working Group was focused on technological solutions that could improve information acquisition, sharing or conversion into actionable knowledge. All three presentations carried a consistent theme of innovation and application of understood, if not proven, concepts since none of the approaches discussed required significant development effort and time. On the contrary the concepts were either in pilot evaluation, had been employed previously with different goals and only needed an evaluation of re-missioning or required a shift in the manner in which we view information.

LCDR Alejandro Ameneiro, Spanish Foreign Liaison Officer, Spanish Navy, presented an overview of the "Multinational Situational Awareness Within the Extended Maritime Environment (MISA-EM)" pilot program as a model for effective maritime communication. The system has been operating effectively in the Mediterranean as a two year effort with the active participation of nine nations, two NATO organizations and experts from 16 international stakeholder organizations and universities.





extremely complicated not only because knowledge is a function of multiple variables, but also because one does not know the total number of variables involved. Mathematically this state of affairs results in an indefinable, and therefore, unsolvable equation. Efforts in three areas need be combined to begin to develop an accurate picture of the maritime domain: a pooling information environment, modeling of maritime activity and access to commercial sector knowledge.

Key enabling technologies are becoming more widely accepted and utilized that can be the platform for improved maritime domain knowledge:

- Cloud storage, which promotes:
  - Information sharing
  - Huge span of available information
- Cloud computing, which promotes:
  - High volume, high speed analysis
  - Machine-to-machine interagency sharing
- Widget technology, which promotes:
  - Modeling with increments of knowledge
  - Wide engagement for developing algorithms
- Attribute-based Access Control, which promotes:
  - Sharing with responsible data stewardship.

It is in the application of these technologies that he suggests more efforts and resources be directed. He concluded with his summary assessment of the state of MDA in the three key areas of data transformation:

- **Data:** We're doing well with cooperative vessels, getting better at non-cooperative vessels and related information; we have improved systems either available or coming on line that should be accessed for more relevant maritime data that can be pooled.
- **Information:** We're doing well at track fusion and correlating related data with vessels; however, future understanding will be enhanced through associated information, behavior, and network relationships.
- **Knowledge:** We're just beginning to develop high-speed, high-volume algorithms for sense-making, but improved models for maritime activity, a defined knowledge framework and access to the commercial partner's knowledge are needed now.

### c. Regional and Global Collaborative MDA

The breakout session was kicked off by presentations from members of the European Union Wise Pen Team. Each of the speakers shared a different aspect of the EU's approach to MDA and the recommendations made by the Wise Pen Team. VADM Ferdinando Sanfelice di Monteforte, Italian Navy (Rtd), led off with a presentation on "European Union Maritime Information Sharing". He explained that the EU approach to issues is 1. to build consensus, 2. to work issues from the bottom up, 3. to recognize that the way ahead may be at an



uneven pace, and 4. that there are two poles in the EU – the EU COUNCIL (member states) and the EU COMMISSION (treaty enactment). VADM Monteforte explained that several major decisions had been made. The EU had agreed to an Integrated Maritime Policy, to implement pilot projects on a regional basis, and most importantly as far as a roadmap was concerned, to a common information sharing environment. Challenges remain and include the fact that the EU is ahead of individual member nations. In general the challenges are: 1. the lack of a networking mind set, 2. the need to harmonize military secrets, judicial confidentiality and commercial sensitivity, 3. differing stages of development between the Law Enforcement Agencies and the Common Security and Defense Policy of the European Union, and 4. defined areas of responsibility. The international challenges that the Wise Pen Team identified included Maritime Schengen (freedom of the seas), reduced paperwork for internal EU trade, and the risk of an intermediate port.



RADM Jean Charles Leclair, French Navy (Rtd), IALA Representative to the International Maritime Organization spoke on "International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) and Maritime Information Sharing". RADM Leclair highlighted that IALA has been involved in maritime information sharing since the beginning of the organization and noted that information sharing is what has made international maritime trade so successful. For IALA, information sharing is essential. Current examples include maritime traffic monitoring, various Vessel Traffic Systems around the world including the English Channel and the approaches to it, AIS tracking and LRIT. The IALA-Net, set up and operated by IALA, combines

this information and provides numerous benefits: maritime safety, search and rescue, marine accident investigation, improving efficiencies of navigation, increased security, detection of illegal activity, traffic analysis, and environmental monitoring. Access to the IALA-NET data exchange is only allowed to countries which provide AIS information themselves to the system. The United States, Denmark and China have each agreed to establish a Data Center at their own cost. The three servers have the same functions and receive the same information, but each one maintains the watch for the system for eight hours a day to limit the running cost of the system and to provide backup to the other servers. Twenty countries are online now, but the IALA would prefer greater participation in the near future.

VADM Patrick Hebrard, French Navy (Rtd), the Wise Pen Team, European Union followed with a discussion on an "European Union Regional Approach to Information Sharing". He posed that the current challenge is to move from a "need to know" approach to information sharing to one of a "responsibility to share". To obtain this shift a top-down approach will be needed supported by strong political will. Emphasizing that the greatest demand for this information is at the regional and local level, he highlighted the three pillars to developing an integrated maritime policy (IMP) for the European Union: Governance, Surveillance and Knowledge. Maritime surveillance is an integrating factor and its optimization for Europe is a long term goal requiring multiple approaches. Two EU demonstration projects with focus on this objective are BLUEMASSMED and MARSUNO. The first is a technical collaboration among Italy, Greece, France, Malta, Spain and Portugal concerning information sharing, coherence, feasibility and confidence building. The latter is parallel pilot project underway in northern Europe.





*d. A Process for Change:  
Improving Information Sharing from the Port Up*

The port level information exchange Wednesday morning breakout session consisted of presentations by Ms. Wendy Walsh, U.S. Naval Post Graduate School, on the “Maritime Information Sharing Taskforce (MIST)”, Captain Mike Goldsmith, Norfolk Police Department, on “Informal Information Sharing in the Maritime Domain”, Detective Candice Wright, Long Beach Police Department, on “Promoting Collaboration & Information Sharing Between Local Maritime Stakeholders”, and Mr. John Veentjer, Puget Sound Marine Exchange, on “Maritime Information Services of North America and Marine Exchange of Puget Sound”.

Each of the four presentations addressed successful MDA occurring at the local port level. Formal and informal, locally-developed, information exchange networks provided the infrastructure for data and voice transfers. Personal relationships between customers and suppliers overcame trust concerns expressed by some attendees during the MDA discussions. Yet those personal relationships between private stakeholders and government officials remained systemically tenuous due to job turnover.

Effective local information exchanges efficiently match the information required by the customer with that which is available from the supplier. Four examples of exchange relationships were discussed that underscored both the diversity of mechanisms from informal to formal and the pragmatism of the processes employed. In some instances the need and availability were easy to determine through a menu of provided services, as is the case with the Puget Sound Marine Exchange. In others it was the personal relationship between local stakeholders that facilitated the customer/supplier interchange. A third established a separate virtual network tailored to the specific information needs of a particular port’s stakeholders. Finally, the fourth captured a formal process that was followed in coordinating information exchange among and between port stakeholders.



Ms. Walsh presented an update on the MIST project, which has been ongoing since 2008. The project seeks to facilitate maritime information sharing, at a local level, through a forum for mutual problem solving and a structured process for two-way sharing of threat information. Three ports have participated in MIST projects (Los Angeles/Long Beach, CA; Puget Sound, WA; Honolulu, HI) with the fourth set to start (Delaware Bay, PA). Sponsored by the U.S. Naval Postgraduate School and supported by several federal agencies, the MIST project has followed a process leading to “relationships, problem solving, and synthesis” that allows stakeholders to

develop trust, identify relevant information needs, and capitalizes on the most effective/efficient ways to communicate information needs. The three pilot projects so far have drawn conclusions that are valuable for MDA leaders to incorporate as the program progresses. Those conclusions include:

- Facilitate private sector participation through alignment of regulations with business practices.
- Incentivize resource and information sharing among/between stakeholders.
- Move beyond just security; prepare an effective response to all hazards.
- Consider economic impacts on suppliers of information; ensure sustainable value accrues to participants.
- Deal with classification issues so useful information can be pushed to the private sector.
- Recognize the value of combining access between MARAD’s MarView and the Coast Guard’s Homeport programs.



Captain Goldsmith presented an effort in Norfolk, VA to explore and improve local information sharing among and between maritime stakeholders that emphasize personal relationships. Stakeholders rely heavily on social networks for information sharing. Successful participants in this effort remain mission-focused, with a non-parochial mind set.

MDA within this sphere is informal in nature, but highly efficient, as largely only relevant information, established through prior discussion, is passed. Emergency responses have already shown the value of this local, informal MDA.

The Virginia Area Maritime Security Committee provides a convenient forum for stakeholders to meet, develop relationships and discuss information needs. Relationships are also established through Joint Terrorism Task Force, InfraGard, and the Virginia Fusion Center. The plethora of these organizations is itself problematic with too many portals, too many passwords. Other drawbacks include the lack of a formal structure to manage the informal networks, what Goldsmith described as, “one transfer away from failure”. Local law enforcement is increasingly challenged by the number of independent formal information sharing networks, each requiring a separate access password and attention. Further, classification of information limits private sector access. Amidst these challenges, tactical, practical, MDA is occurring in the port of Norfolk, VA.

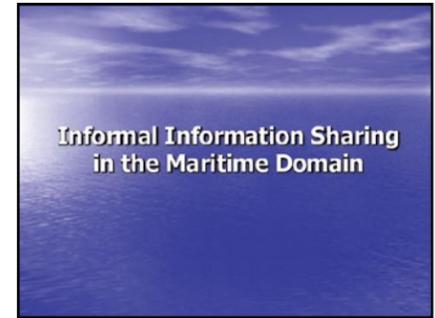
Detective Wright presented another informal MDA network that has emerged in the ports of Long Beach, and Los Angeles, CA. Like Norfolk’s, it relies on personal relationships and social networking, but is more structured. Drawing on MIST principles, stakeholders in the public sector have collaborated with their private counterparts to create an information sharing and intelligence dissemination cyber network (Regional Public Private Information Communication System) in conjunction with the local FBI Infrastructure



Liaison Officer. The Seaport Environment Awareness Common Operating Picture (SEACOP) between law enforcement agencies provides a platform for agency participants to share situational awareness of both planned events and actual incidents or suspicious activity.

Drawing in industry as both suppliers of information to the law enforcement community and as consumers of intelligence, the Information Communication System urges stakeholders on both the public and private sector side to analyze and convey their information needs. The system, in pilot testing, allows for the sharing of real time information in a virtual office. Using training as an incentive, private sector participants can be trained as infrastructure liaisons, vetted by the FBI. This helps overcome the recurring classification of information problem.

Mr. Veentjer presented local MDA efforts currently facilitated through formal subscriptions with marine exchanges, such as the Puget Sound Marine Exchange. Marine exchanges are plugged into the AIS networks (over 150 sites), but also validate scheduled arrival times of vessels with updates on their actual arrival and departure. The marine exchange has both public and private sector customers, and provides communications and other local port support activities for its members. It maintains a valuable database of vessel movements in a particular area, a treasure trove

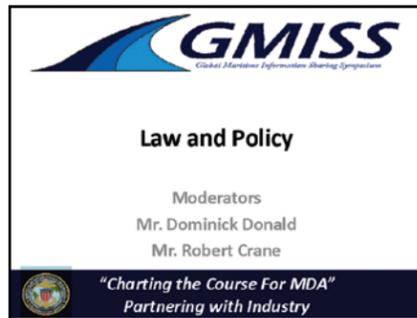




of information for safety, security, and environmental risk management. Marine exchanges are non-profit, but do require funding from participants to cover their operating costs. At their core, marine exchanges are information brokers between public and private suppliers and public and private customers. While not providing all of the MDA information ultimately sought by users, marine exchanges can provide significant pieces of the risk management puzzle.

## VIII. Working Group Sessions

### a. Ocean Law and Policy



The Working Group session in the afternoon was designed to build upon the morning discussions. The charge to this group, as to the other working groups, was to generate four questions that the participants felt were the most pressing to be asked of the Flag Panel to be held during the following morning's plenary session.

The MDA Information Sharing watchwords of "Transparency and Trust" served as the cornerstones for the ensuing discussions. The real world disappointments translate into a heightened unwillingness to share further information when industry's input was not solicited, not considered, and policies were published which resulted in adverse consequences.

The working group was adamant in its frustration over the development, review, and publication process for the recently enacted Executive Order on Piracy and pointed to it as a timely example of harm to the industry specifically and to the United States globally.

The work session resulted in the following questions:

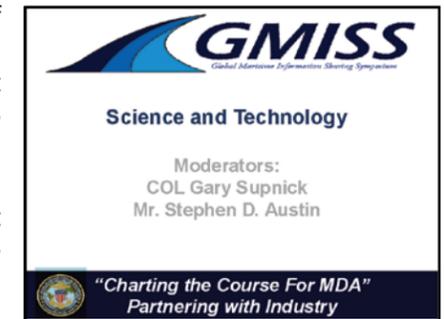
1. What is the point of industry participating in discussions such as this conference when policy overrides that advice and damages the industry and global commerce?
2. The Executive Order on Somali piracy is ineffective, counter-productive, and issued against industry advice. It has raised costs for the maritime industry and damaged U.S. credibility on this issue, without the prospect of substantially affecting the pirates and their financiers. What can industry and the executive branch do to get the E.O. rescinded?
3. The U.S. failure to ratify UNCLOS undermines its credibility in the international maritime arena and hampers its efforts to address a range of policy issues. What can industry and the Executive Branch do to get it ratified?
4. U.S. maritime initiatives have global maritime consequences which are then felt in the U.S. in terms of jobs lost, industries affected, and supply chains disrupted. The U.S. has in the past successfully used the International Maritime Organization (IMO) as the forum for these initiatives, which like ISPS (port security), are vital to its interests. Recent examples on unilateral policy-making, such as the E.O. on Somali piracy, have not been successful. How can U.S. counter-piracy policy be returned to the IMO?

### b. Science and Technology

The second morning's Science and Technology Breakout session was followed by a Working Group Session that afternoon. Rather than directed along specific topic lines as had been the format for the Working Groups in GMISS 2009, this year's session was a facilitated discussion that focused on the conference's



theme of "Charting the Course for MDA" with specific emphasis on technological solutions. Gary Supnick of SRI's Center for Maritime and Port Security and Stephen D. Austin of McMunn Associates were the facilitators for the session. An early theme emerged in the discussions that portrayed solutions for enhanced information sharing and an improved state of MDA as a "to be developed" architecture, but as yet, one for which the requirements definition had not been agreed upon. Numerous comments highlighted a general frustration generated among the group over the lack of creativity apparent in many of the solutions implemented to date, especially in the application of existing capabilities and resources, e.g. cloud computing and storage and commercial satellites. In response, the offer to expand an ongoing test bed at NMIC on cloud computing concepts was made to the group by one Navy participant. An example of the SABRE system used by the commercial airlines as a database accessible by all for the benefit of all was pointed out as an early "cloud-like" concept that incentivize industry to share flight and schedule related data. There was an attendant attitude supporting the earlier discussed point of learning through failure made by both Michael Jones of Google and LCDR Ameneiro of MISA-EM.



Agreeing that MDA is more than security, the group emphasized that inclusion of as many varied information sources was imperative for an accurate picture, which implied that access to the information need be layered by a "need to know" based on content and classification. As there is already a structure that has implemented four related information sharing hubs, the question arose as to the creation of a national maritime information exchange that could evolve into a global resource. In support of such an expansion, a de-confliction of the various regulations and policies that impact MDA must be undertaken as well as the elimination of penalties to industry for sharing sensitive or competitive data. Finally the group noted that though there are published strategies for the Departments of Homeland Security, Navy and Transportation that include the strategies to be undertaken by their Science and Technology (S&T) directorates in support of specific goals, there seemed to be no cross correlation of the S&T objectives nor prioritization among the departments responsible for improving and expanding MDA as a primary asset in a comprehensive, multi-layered homeland defense.

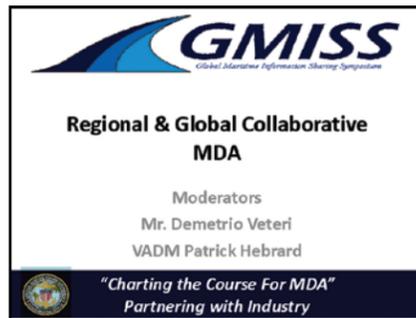
In responding to the charge made to the working group, the four questions that were coalesced from the discussions during the session and presented to the Flag Panel on the third day of the conference included:

1. From the perspective of Maritime Domain Awareness and Maritime Information sharing, which area of focus for the Science and Technology Directorates in DHS, DOD and DOT does the panel feel is the most important?
  - Needs/Requirements definition
  - Systems development/CONOPS
  - Data acquisition/sensor development
  - Coherence
2. What does the panel feel is the highest priority of intelligence data or security information that is needed in the context of MDA – that on people, cargo, vessels, infrastructure or the commercial marketplace?
3. How might the government gain the trust of and/or motivate private industry to collaborate on the development and implementation of a maritime information sharing tool?
  - Does the panel feel that a government sponsored test bed would be an effective method to achieve improved information sharing?



4. Does the panel see the approaches being evaluated in the Mediterranean and the Baltic (federated, regional, unclassified, subscription based, vetted and provide information to stakeholders on a contextual, access-specific basis from a virtual internet based platform employing open source technology) or a similar approach as a possible model for a single US national maritime information exchange that could provide access to both industry and global partners?

*c. Regional and Global Collaborative MDA*



The Working Group session in the afternoon was organized to continue the discussions and issues brought up during the breakout group, and to formulate questions for the following day's Flag Panel. The working group also wanted to connect with the overall theme of the symposium, "Charting the Course for MDA", as well as the customer-supplier relationship of information sharing. The moderators for the work group were Mr. Demetrio Veteri, Deputy Commander, Australian border Protection command, and VADM Patrick Hebrard, French Navy (Rtd.), from the EU's Wise Pen Team.

The discussions focused on the importance and need for information sharing. There were many excellent examples of ongoing regional information sharing. The challenge seems to be how to build on those successful ventures and build out the system into a global one. The group highlighted several aspects that they thought were critical to building this information sharing system and process. The first and most important was trust, which is built through cooperation, collaboration and coordination. The second aspect was the examples of regional information sharing. These ongoing successes should be emulated and expanded to other regions. These can and should be connected and be the basis for a global system. This may require an international broker for MDA information (neutral, respected). The maritime industry needs a basic information sharing "message" to all marine entities, one that allows every mariner or dockworker to understand their role in MDA and security. The GMISS conference information must be shared with International Navies who are conducting a Global Partnership Game in October. The group felt that the best way forward was to continue to develop regional MDA organizations, and facilitate the interconnections of these regional MDA users. They also saw the need to transform the sea into a controlled environment (i.e. aviation).

The group developed the following series of questions for the panel:

1. Do you have a global MDA roadmap (a plan to get there)? If yes, where is it? If not, why not?
2. Based on the EU experience of a step by step process to build MDA, what are your initial steps to pursue global MDA?
3. Who will fund & build an International Web Portal for various MDA inputs?
4. An inventory of MDA systems in the U.S. is underway now. Is there an international inventory of regional MDA systems? If so, how can it be accessed?
5. Has NORAD completed an assessment of CANUS MDA progress? Is there any comparison to what has been done in other regions of the world?
6. Is the idea of Global MDA a reality anytime soon? How can we get there? What is the framework?
7. From the international perspective, who is the single contact point in the U.S. for international inputs and engagement?

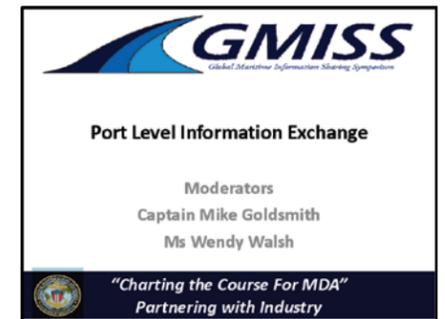


8. Where is the single portal for industry to input all MDA data that is required? This includes customs information, immigration, cargo, advanced notice of arrival, etc.
9. If you want global MDA, what is being shared currently with other countries and the worldwide shipping industry?
10. What is the problem with information sharing?

*d. A Process for Change:*

*Improving Information Sharing from the Port Up*

The Port Level Information Exchange participants convened Wednesday afternoon to build upon the morning's presentations and identify issues that could be framed in the form of questions to the Flag Panel. Discussions during the work group session highlighted frustrations over clearances that limit access to critical information by private sector stakeholders as well as incentives for industry to share information. During the discussion, attendees noted a new Executive Order that had been promulgated, designed to broaden private sector access to heretofore restricted federal government information. New technology exists that could rapidly disaggregate information, thus producing "tear lines" much more easily.



The panoply of information sharing entities, such as Joint Terrorism Task Forces, Fusion Centers, Joint Harbor Operation Centers, etc. detracts from actual information sharing due to time constraints, multiple password requirements and different focus. Without having asked what information local stakeholders actually want, these potentially duplicative entities introduce inefficiency into the MDA data exchange equation.

Informal, social networks are emerging at the local level, built on personal relationships, inspiring trust and efficiency due to increasing use of communication and internet applications. These networks, effective at the local level, are not formalized and therefore are not currently incorporated into larger MDA efforts. The personal relationships hinge on the parties remaining in their current positions, something that changes due to transfers.

Incentives to participate in information exchange were the subject of significant discussion. The work group identified opportunities where government information would help private sector stakeholders (CTPAT applicants for example) that could encourage greater private sector information sharing to government.

The Work Group's questions for the senior government panel were:

1. Would you support establishing a group to seriously address the MDA issues that have been raised at this year's GMISS—many of which were the same as previous GMISS—that includes all the relevant stakeholders from both industry and government?
2. The real or perceived need for classification of information from both government and industry has delayed or blocked information from getting to those who could use it to provide risk mitigation value. With new technology and a new Executive Order as catalysts, how quickly could this problem be lessened?



3. The multitude of information sharing vehicles impairs both the supply and use of the information. Would you support merging elements of JTTFs, Fusion Centers, etc on the government side, and Industry Sharing and Analysis Centers (ISAC) on the industry side into Joint Harbor Operations Center type organizations to reduce the time demand on stakeholders searching for relevant, local information?
4. What can be done to leverage the reality of emerging local social networks into the broader national MDA program?
5. Who in government could integrate incentives into the information sharing system that might be valuable to both stakeholder sides and who could provide a menu of available incentives to stakeholders?

### IX. Flag Panel

On the final morning of the conference, each of the working group facilitators presented a brief summary of the previous day's breakout and group discussions. The primary deliverables presented at this point were the lists of questions each working group had prepared for the Flag Panel. Mr. David A. DellaVolpe, Chairman of the Naval War College War Gaming Department, was the panel moderator, posing specific questions to individuals and to the panel at large. The participants on the panel were:



**RADM Kevin Cook, US Coast Guard, Director of Prevention Policy**  
**RADM Mark Buzby, US Navy, Commander, Military Sealift Command**  
**RADM Jeffrey Lemmons, US Navy, OPNAV Director for International Engagement**  
**RDML Dan Abel, US Coast Guard, NORTHCOM Deputy Director of Operations**  
**Mr. Joe Byrne, Department of Transportation Executive Agent for MDA**

Each panelist provided a brief introductory statement. RADM Cook talked about the Deepwater Horizon joint interagency response and the MDA information network established and used to coordinate the complex operations during this disaster. RADM Buzby highlighted the significant volume of cargo and materials moved by the Military Sealift Command to support operations in Afghanistan and Iraq. RADM Lemmons mentioned the Naval Cooperative strategy document and its connection to MDA through the Navies of the world. RDML Abel outlined NORAD's maritime warning mission, and the 30 agencies that work together within NORTHCOM on the MDA and threat issues. Mr. Byrne expressed the importance of knowing your "domain", no matter where or what you are doing. He emphasized the need for partnering and importance of meetings/conferences like GMISS.

The panel was then presented with a series of questions taken by the moderator from the questions posed by the four work groups.

- **Question 1.** The issue of trust was brought up in all of the work groups. How do you build trust? Several panelists addressed this by giving examples of local/regional efforts that have built this trust at that level. It was acknowledged that this is still developing and needs to grow.
- **Question 2.** This question was regarding the US Executive Order on Piracy, and how it could be corrected or rescinded. A panel member mentioned that industry must be forthcoming with their concerns to the government. This then prompted several additional points from the audience and further comments from the panelists regarding the inputs provided by various agencies and



departments, the flow of the reaction information up the chain of command in the US government, industry's problem now, and how to move forward. This was definitely a "hot button" issue for the commercial shipping industry representatives at the conference.

- **Question 3.** International MDA is complex and involves the whole of government(s), legal, policy, and network issues. What do you see as the end state for MDA? What is the plan to get there? The panel opined that the system must be responsive to short notice threats, and that there needs to be a maritime version of the aviation international airspace control and information sharing network. The panel did not have an answer to the end state question, or to the road map question.
- **Question 4.** MDA includes information on vessels, cargo and people. Which of these is the first priority? The panels answer was that we clearly need all three; however, the combination of the information is paramount.
- **Question 5.** Who is managing the MDA effort? The panel offered a number of answers that demonstrated what various agencies and departments were doing, sometime in coordination, and sometimes on their own. Examples included the International Sea power Symposium's work with all navies attending, NMIC and its COP, the N2/N6 reorganization by the US Navy, and others.



*Appendix A*  
**GMISS 2010 Agenda**



**GLOBAL MARITIME INFORMATION SHARING SYMPOSIUM**

September 14-16, 2010  
Hilton Baltimore, Baltimore, MD  
Uniform: Business Attire

*Charting the Course For MDA*  
*Partnering with Industry*

**MONDAY, September 13th (Check-in / Travel Day)**

1700 Registration Opens  
1800-2000 No-Host Reception at Hilton Baltimore (Light Hors d'oeuvres & Cash Bar)

**TUESDAY, September 14th (Conference Day 1)**

**Morning Plenary Session**

**0800-0900** Breakfast & Final Registration – Hilton Baltimore

0845 Welcome CAPT David Sanders, JAGC, USN, NMCO Legal Counsel

**0900-0910** OPENING REMARKS **VADM Sally Brice-O'Hara, Vice Commandant, USCG**

0915-0930 Perspective: GMISS Continuum Mr. Lennis Fludd, Maritime Administration (MARAD) U.S. Department of Transportation

0930-0945 CANUS Interagency Maritime Domain Awareness Forum CAPT(N) Kurt Salchert, Canadian Forces Chief, NORAD Maritime Division

**0945-1015** KEYNOTE ADDRESS **Mr. Michael T. Jones, Chief Technology Advocate Google, Inc.**

1020-1045 Working to Make Tanker Terminals Safer Captain John Hill, Heidmar Inc.

1045-1115 Break

1115-1140 Community Oriented Policing Services (COPS) Ms. Sandra Webb, Deputy Director, US Department of Justice Community Oriented Policing Services

1140-1205 Port Security Perspective Mr. Bud Frank, Director of Security Maryland Port Administration

**1215-1330** LUNCH **ADM H.G Ulrich, USN (Ret.)**  
"International Maritime Safety and Security Exchange:  
A Promising Business Model for Global Maritime Safety and Security."

**Afternoon Plenary Session**

1335-1400 Cargo Information Sharing Mr. Robert Quartel, Chief Executive Officer, NTELX

1405-1430 LNG Shipping Perspective Captain Mark Lane, Excelerate Energy

1430-1445 Break

**1445-1645 MDA Town Hall Meeting**

The MDA Town Hall meeting brings the National MDA Coordination Office (NMCO) Principals Panel and Maritime Industry representatives together to directly address key issues on maritime security and information sharing policies for the protection and free flow of commerce. This moderated discussion will begin with a ten-minute introduction of the Principals Panel and their mission followed by a 50-minute Open Forum and then 45 minutes of audience questions.

**Moderator: Mr. Tony Muñoz, Editor-In-Chief, Maritime Executive Magazine**

**Panelists:**

**Mr. Joe Byrne**, Department of Transportation Executive Agent for MDA

**Ms. Beth Gedney**, Director of Safety, Security, and Risk Management, Passenger Vessel Association

**RDML Samuel Cox, USN**, Director, National Maritime Intelligence Center

**Mr. Thomas Hogdson**, Secretary, Connecticut Maritime Association

**Mr. Dana Goward**, Department of Homeland Security Executive Agent for MDA

**Capt. Mike Murphy**, National Vice President At Large, American Maritime Officers

**Mr. Bruce Stubbs**, Department of Defense Executive Agent for MDA

**Mr. Giles Noakes**, Director of Security, BIMCO

**1730-1930** No-Host Social, Hilton Baltimore

**1900** **Baltimore Orioles vs. Toronto Blue Jays, Camden Yards**  
*No-host optional event across the street from the Hilton*



Working with Industry to find the Balance between Safety, Security, Commerce, and Environment.

**WEDNESDAY, SEPTEMBER 15th (Conference Day 2)**

- 0800-0845 BREAKFAST
- 0815-0845 Breakfast Speaker: CDR Patrick Dibari, USCG, Technologies for Port Security

**Morning Plenary Session**

- 0845-0930 Summary of GMISS 2008 and 2009 findings, Recommendations, and MIST Summary  
CAPT George McCarthy, USN, Former NMCO Deputy Director
- 0930-0945 Breakout Group Introduction and Instructions  
CAPT David Sanders, JAGC, USN, NMCO Legal Counsel

**Breakout Sessions**

Breakout sessions are divided into four topics on *Law & Policy*, *Science & Technology*, *Regional & Global Collaborative MDA*, and a panel from the *Naval PostGraduate School's Maritime Information Sharing Task Force (MIST)*. Attendees should participate in one of the topics prior to lunch and be prepared to roll up their sleeves for the afternoon working groups. The purpose of the breakout session is to give a quick, very brief update on changes in global maritime safety, security, commerce, and the environment. Additionally, this forum will promote follow-on dialogue in the afternoon working groups and issues to be raised to the following day "Flag Panel Discussion". Three speakers will be restricted to 15 minute presentations with a 15 minute question period. If finished early please break for coffee. For in-depth discussions, please utilize breaks which are built into the schedule.

**Ocean Law & Policy**

- 0945-1015 *Marine Spatial Planning*  
Dr. John Oliver, USCG Ocean Policy
- 1015-1045 Break
- 1045-1115 *The Impact on Industry of Marine Spatial Planning & Ocean Policy*  
Mr. Jack Belcher, EnergyNorthAmerica
- 1115-1145 *Piracy Policy & the "Redwing Incident"*  
Mr. Claude G. Thouret, Jr., Eagle Bulk Shipping, Inc.

**Science & Technology**

- 0945-1015 *Multi-National, Inter-Agency Information Sharing in the Extended Maritime Environment (MISA-EM)*  
LCDR Alejandro Ameneiro, Spanish Foreign Liaison Officer, Spanish Navy
- 1015-1045 Break
- 1045-1115 *Use of Commercial Satellites for Increased MDA: TEXAS IV, C-Sigma*  
Mr. George "Guy" Thomas, USCG Science & Technology Advisor
- 1115-1145 *State of the Art on Maritime Systems*  
Dr. John Mittleman, Naval Research Laboratory

**Regional & Global Collaborative MDA**

- 0945-1015 *European Union Maritime Information Sharing*  
VADM (Ret.) Ferdinando Sanfelice di Monteforte, The Wise Pen Team, European Union

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- 1015-1045 Break
- 1045-1115 *International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) and Maritime Information Sharing*  
ADM Jean Charles Leclair, (MN Ret.) IALA Representative to the International Maritime Organization
- 1115-1145 *European Union Regional Approach to Information Sharing*  
VADM Patrick Hebrard (Ret.), The Wise Pen Team, European Union

**A Process for Change: Improving Information Sharing from the Port Up**

- 0945-1015 *Maritime Information Sharing Task Force Update*  
Ms. Wendy Walsh, Naval PostGraduate School
- Informal Information Sharing in the Maritime Domain – A Norfolk Perspective*  
Captain Mike Goldsmith, Norfolk Police Department
- 1015-1045 Break
- 1045-1115 *Promoting Collaboration & Information Sharing Between Local Maritime Stakeholders*  
Ms. Candice Wright, Long Beach Police Department
- 1115-1145 *The Role of Maritime Exchanges in Information Sharing – Challenges and Best Practices*  
Mr. John Veenjtjer, Marine Exchange of Puget Sound

**1200-1315 LUNCH Mr. David Matsuda, Maritime Administrator**

**Maritime Stakeholders' Perspective Working Groups**

- 1315-1330 Working Group Instructions - Plenary Session
- 1330-1530 Working Groups
- 1530-1600 Group Wrap-up

The working groups are an opportunity for industry and government to partner on global issues, congressional mandates, and executive decisions that upset the equilibrium between safety, security, commerce and the environment. Four working groups will continue to explore the topics raised in the morning's breakout sessions. This year, the goal of each working group is to produce four (4) questions which will be asked of the next day's Flag Panel. The four questions will address the issues of interest as decided by the group as a whole. Facilitators and Discussion Co-Leads will guide the discussions to ensure all sides of a topic are explored.

**Group #1**

**Law & Policy**

- Facilitator: C&H Global Security
- Co-Leads: Mr. Robert Crane, Senior Homeland Security Advisor, National Coordination Office for Space-Based Positioning, Navigation, and Timing Policy, Department of Commerce  
Dr. Dominick Donald, Director, AEGIS Advisory, London, UK



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**Group #2**

**Science & Technology**

Facilitator: C&H Global Security

Co-Leads: Mr. Stephen D. Austin, McMunn Associates

Mr. Gary Supnick, Deputy Director, SRI Center for Maritime and Port Security

**Group #3**

**Regional & Global Collaborative MDA**

Facilitator: C&H Global Security

Co-Leads: Demetrio Veteri, Deputy Commander, Australian Border Protection Command

VADM Patrick Hebrard (ret.), The Wise Pen Team, European Union

**Group #4**

**Industry Voice in Information Sharing at the Local/Regional Port Environment**

Facilitator: C&H Global Security

Co-Leads: Captain Mike Goldsmith, Norfolk Police Department

Ms. Wendy Walsh, Naval Postgraduate School

**Gala Dinner**

**1900-2200**

**Gala Dinner at Hilton Baltimore**

**Gala Address: Mr. Jeffrey Howard, Director of Enterprise Programs, LexisNexis Special Services**

**Music provided by the United States Naval Academy Band Brass Quintet**



Working with Industry to find the Balance between Safety, Security, Commerce, and Environment.

**THURSDAY, September 16th (Conference Day 3)**

0800-0900 Breakfast

0815-0845 Breakfast Speaker: Ms. Donna Hopkins, U.S. Department of State Maritime Security Sector Reform

**Morning Plenary Session**

0900-1000 Summary Report of Working Group Findings to Plenary – Group Facilitators

**Flag Panel**

**1000-1015 Flag Panel Moderator: Dean Robert Rubel, Naval War College**

The Global Maritime Information Sharing Symposium (GMISS) is an opportunity for open and frank discourse between government and industry. The "Flag Panel" session will include five senior US government officials who will participate in an unrehearsed discussion on MDA. The two hour session will begin with five minute opening statements from each participant. The moderator will then present the questions developed by Wednesday's working groups, followed by an open Q&A with GMISS attendees. The Flag Panel offers GMISS attendees the opportunity to converse with senior US government officials, examine the previous two days' finding, and express viewpoints directly to senior leaders in MDA. Senior USG leadership will hear, unfiltered, the problems that the maritime industry is confronted with as the USG continuously strives for the right balance between safety, security, commerce, and environment.

**1015-1215 Discussion with MDA Flags: (Non-Attribution)**

**DOT Mr. Orlando Gotay  
Deputy Maritime Administrator**

**DHS RADM Kevin Cook, USCG  
Director of Prevention Policy, USCG**

**DOD RADM Mark Buzby, USN  
Commander, Military Sealift Command**

**DOD RADM Jeffrey Lemmons, USN  
OPNAV Director for International Engagement (N52)**

**DHS RDML Dan Abel, USCG  
NORTHCOM Deputy Director of Operations**

**Closing Remarks**

**1215 Closing Remarks**

**VADM David J. Dorsett, USN  
Deputy Chief of Naval Operations for Information Dominance (N2/N6) and Director of Naval Intelligence**



**Appendix B.**  
***GMISS 2010, Plenary Sessions, Tuesday, Sep 14th – Presentations and Speeches***

(Please note that only summaries are included in this document, but complete presentations or speech text can be found on the included CD.)



**VADM Sally Brice-O'Hara**

Vice Commandant U. S. Coast Guard  
Opening Remarks



“Continued Commitment to MDA” was the over-arching theme. VADM Brice-O'Hara alluded to the balance between safety and security which must be achieved in the MDA arena. While conceding that the government was still charting a course after nine years, she pointed to a number of advancements which have been made; the national MDA stakeholder board, the effective public-private partnership in the use of AIS information (particularly in the recent Deepwater Horizon incident), the long range tracking program, and the ‘watch keeper’ software being deployed to enhance collection, fusion, and sharing of critical information. Recognizing that the government/industry relationship is complex, she re-iterated the government’s goal of avoiding an undue burden on industry in its data collection efforts. She again acknowledged the industry’s frustration and urged an open and frank dialogue during the symposium. VADM Brice-O'Hara closed with a challenge to the attendees to chart ways to improve the public/private relationship and data collection and to encourage a desire to “steer in the right direction”.

**Mr. Lennis G. Fludd**

Maritime Administration (MARAD)  
Chief of Staff, NMCO  
Perspective: GMISS Continuum

Mr. Fludd provided the attendees an historical perspective for the 2010 GMISS, which was the third of five planned symposia, intended to provide an open forum for maritime industry representatives to interact with members of the USG. In recent years the US government has recognized a need to listen to the concerns of an industry that is not only critical to the health of the domestic economy but is also inextricably entwined in the global market place.

Hosted by the National MDA Coordination Office and sponsored by numerous Federal agencies the inaugural GMISS was held in August of 2008. Attendees included a diverse mix of over 125 participants from maritime companies, associations, navies, coast guards and government agencies from around the world. The main focus of discussions centered on information sharing, specifically Law Enforcement Information Sharing in the Maritime Environment, Regional Blue Water Information Sharing and an increased understanding and data sharing with the commercial maritime industry. Among the findings from this event:

- The need for USG to speak a singular MDA message,
- The need for a coordination of USG maritime information requests of industry,
- The need for a single portal to send requested data for subsequent internal USG distribution,
- The need for action towards mutually beneficial solutions and
- Was it necessary to continue to hold GMISS?

With a theme of “Aligning government outreach to the maritime industry by bringing the industry perspective into government policy”, the second GMISS was held in September in Washington, DC. Answering the last question from the initial symposium, the attendance grew to more than 230 participants from around the world with representatives from 15 countries.



The primary concerns and recommendations from this assembly were:

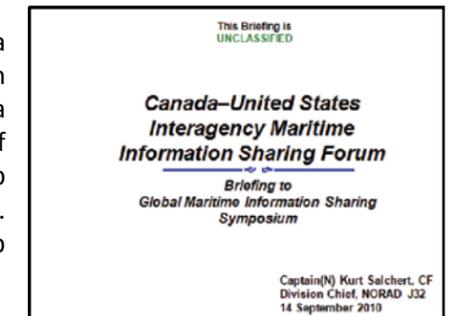
- The development of a network to link existing information sharing infrastructure and consolidate AIS sharing networks,
- Evaluation of existing training to improve mutual understanding,
- Identifying gaps, and instituting the needed resources to close such gaps
- Greater access to U. S. government policy makers and
- Global marketing of maritime information sharing

In closing, Mr. Fludd shared his enthusiasm that in the 2010 GMISS over 265 attendees will discuss a variety of possible answers to “Charting the Course for MDA” with specific emphasis on improving the customer – supplier relationships.

**Capt (N) Kurt Salchert**

Canadian Forces  
Chief, NORAD Maritime Division  
CANUS Interagency Maritime Domain Awareness Forum

Capt. Salchert presented an overview of the NORAD sponsored Canada – U.S. conference held the previous day. He characterized this as an example of the ongoing regional and international efforts to build a complete MDA picture and understanding. He talked about examples of coordinated efforts, emphasizing that 1. the Canada – U.S. relationship is unique, 2. massive amounts of MDA data must be analyzed, and 3. there are a number of enablers that the Canadian – U.S. relationship provides that could be applied in the global MDA effort.



**Mr. Michael T. Jones**

Chief Technology Advocate  
Google, Inc.  
Keynote Address



Mr. Jones urged the GMISS attendees to think differently about data and information when trying to improve global MDA. He suggested that broader utilization of the internet, “the best communication vehicle ever”, as he termed it, and its multitude of daily users was the way to ensure information superiority—the shield against bad things happening. Reducing restrictions on data transfer through more open sourcing and revisiting classification of information allowed the leveraging of worldwide information providers, many of whom are not currently involved in providing information that might be of MDA value—but could be.

To incorporate this paradigm shift, MDA users should consider sharing and accessing as much raw data as possible and then use that data/information in a manner that supports each organization’s mission. This contrasts with the current way many organizations share information—analyzing and editing it before



making it available to others. Mr. Jones suggested more risk taking in adopting this approach noting the greater good was likely to far outweigh the episodic failures that might occur with a sensitive information release. He thus argued for fewer formal rules for information exchange, encouraging more sharing to overcome the “paralysis to share”.



**CAPT John Hill**

Director, Marine Risk Management, Heidmar Inc.  
“Working to Make Tanker Terminals Safer”

Captain Hill’s remarks dovetailed very nicely with the prior Keynote presentation by Mr. Michael Jones, Chief Technology Advocate, Google who had stressed the universal availability of information on the web and the effectiveness of volunteer mapping. Captain Hill’s program is a commercial adaptation of that concept. Participating tanker operators provide real world updates on the materiel conditions of tanker terminals

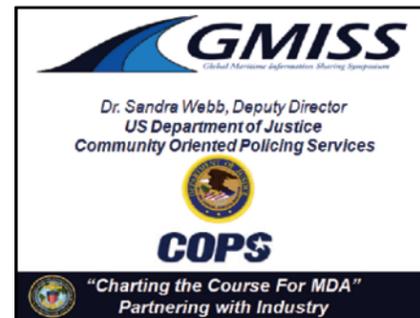
worldwide in order to reduce risks to ships, personnel, and cargoes. Updates on terminal conditions are used by Heidmar to interact with terminal operators/owners to repair broken infrastructure, improve cargo handling methods, limit occasions of potential damage to vessels all with a goal of reducing risk. Reduced risks can translate into reduced insurance costs and lower operating expenses.

**Dr. Sandra Webb**

Deputy Director, COPS  
USDOJ

“Community Oriented Policing Services (COPS)”

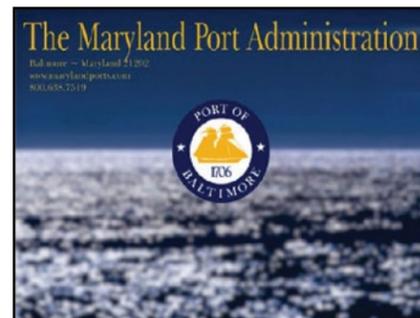
As an operating example of an effective information exchange among state, local and tribal level policing organizations, Dr. Webb provided an overview of COPS. She emphasized that at the core of this Department of Justice program are the underlying foundations of partnerships and combined problem solving. Since 1984 the program has provided over \$13 Billion in related grants, including scholarships for attendance at GMISS. More than 20 attendees of this event were supported by this aspect of the program. One key objective is information sharing and toward this end, COPS is working closely with the FBI, DHS and the Office of Information Sharing Director. Dr. Webb closed emphasizing COPS strong support of GMISS and their desire for continued participation.



**Mr. Bud Frank**

Director of Security, Maryland Port Administration  
Port Security Perspective

Mr. Frank presented aspects of MDA from the perspective of a major port operation – Baltimore Harbor. Responsible for all of the ports in Maryland, including Washington D.C., he highlighted the benefits of information sharing that he has witnessed due to intermodal and infrastructure connections, and the linking of information sharing systems and processes being used by Maryland. In addition to



informal relationships and the participation of Maryland business organizations, the state or port can call upon five formal resources for information sharing, including the Maryland Coordination and Analysis



Center and the Maryland Joint Operations Center located in the Maryland Emergency Management Center. In addition he described the variety of technological solutions Maryland has employed to improve oversight and coordination of efforts, e.g. integrated, web accessible closed circuit televisions in numerous locations throughout the state.

**VADM Harry Ulrich**

(U.S. Navy, retired)  
Board Director, Atlantic Council

VADM Ulrich, a luncheon speaker, noted that progress in MDA had not been as much as most attendees had hoped. He noted that to truly jump start MDA, stakeholders needed to get organized, get global, and get regulated. Speaking mainly to government stakeholders, VADM Ulrich stated that someone needs to be in charge, both nationally and internationally, or true progress will not be realized. He offered that MDA is a global challenge; therefore, a national solution is insufficient. The private sector must be involved because they hold much of the data. He urged the creation of an International Maritime Safety and Security Exchange run similarly to stock exchanges. The exchanges would operate on trust with firm rules, ruthlessly enforced. Agreeing to participate in the MDA exchange would mean agreeing to make information available to all users, who could then employ that information as they need.

**The Hon. ROB QUARTEL**

CEO, NTELX  
Former member of the Federal Maritime Commission  
“Cargo Information Sharing”

Mr. Quartel opened by saying he intended to give reflective remarks about how the US operationalized our fears following the 9-11 incidents. He recalled that the initial concern was the undetected delivery of a container with a weapon of mass destruction (WMD) into one of our seaports. This resulted in congressional actions to mandate 100% inspection of containers (an unrealistic goal and disruptive to global supply chain movements). In retrospect, Mr. Quartel recognized that this was the wrong approach, which took him to his major point that currently we are working against the wrong problem. Prior to reaching his conclusion he pointed out the supply chain management is really about routine activity. You need software to spot anomalies in a transaction-its funding, movement, consignment, etc. He acknowledged the utilization of a strong electronic perimeter for tracking vessel activity outside of the country, but pointed out that MDA encompasses far more than ships. It also includes trucks, trains, financing and is too big to fit inside one hat. These routine movements must yield to information sharing on a broader width to detect what is not routine. Information data analysis must become predictive versus reactive. He urged a reconsideration of the underlying premise driving the government’s rightful response to the wrong problem.

**CAPT Mark Lane**

Senior Vice President  
Excelerate Energy  
The LNG Shipping perspective

Captain Lane presented an overview of one of the potentially most dangerous but concurrently the most misunderstood of maritime cargos – liquefied natural gas (LNG). He provided a comprehensive picture of the various types of LNG tankers and emphasized that in





over 34 years and 100,000 plus voyages, their safety record is outstanding – only two groundings and no loss of life. Despite the perception created by a less than informed public and amplified by the press and movies such as “Syriana” in which an RPG is implied to be able to cause a horrific explosion on an LNG tanker, the ships are extremely well engineered and designed to withstand the most extreme potential catastrophes. In addition they all have comprehensive security plans that are regularly exercised. His message to the audience was “Let’s not guess” when it comes to the safe transport of certain dangerous cargoes, stressing that security should be uppermost for both maritime shipment and land based terminals handling LNG.

**MDA Town Hall Meeting**

Moderator: Mr. Tony Munoz

Editor-In-Chief, Maritime Executive Magazine

**Panelists:**

Mr. Joe Byrne, Department of Transportation Executive Agent for MDA

Ms. Beth Gedney, Director of Safety, Security, and Risk Management, Passenger Vessel Association  
RDML Samuel Cox, USN; Director, National Maritime Intelligence Center

Mr. Thomas Hodgson, Secretary, Connecticut Maritime Association

Mr. Dana Goward, Department of Homeland Security Executive Agent for MDA

Captain Mike Murphy, National Vice President At Large, American Maritime Officers

Mr. Bruce Stubbs, Department of Defense Executive Agent for MDA

Mr. Giles Noakes, Director of Security, BIMCO



The MDA Town Hall meeting brought these knowledgeable individuals together to directly address key issues on maritime security and information sharing policies for the protection and free flow of commerce. While the makeup of the panel created a U.S. centric viewpoint at the national government level, this session highlighted the diversity of organizations that are stakeholders in maritime security, whether U.S. or international, state and local governments and agencies, private industry or non-profit groups. The comments by each panelist and the answers to the questions by the audience highlighted the need for accountability, responsible information sharing, the impacts of unilateral actions by nations, and the need for a system wide approach for mariner involvement.



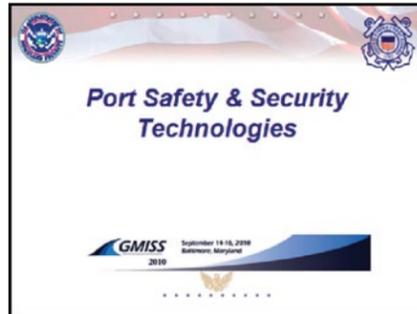
**Appendix C.**  
**GMISS 2010, Wednesday, Sep 15th – Working Group and Breakout Session Presentations; Breakfast, Lunch and Dinner Presentation and Speeches**

(Please note that only summaries are included in this document, but complete presentations or speech text can be found on the included CD.)



**CDR Patrick Dibari, USCG**

Office of C4 and Sensor Capabilities, USCG  
Port Safety and Security Technologies



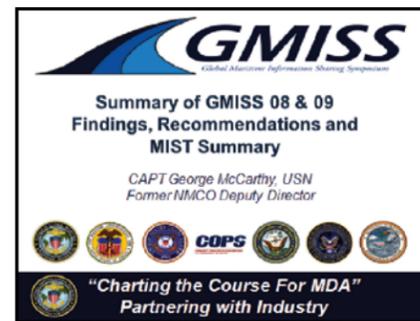
CDR Dibari outlined three major information sharing programs that have enhanced USCG operations over the past five years: Rescue 21, Homeport, and Interagency Operations Centers. Rescue 21 improves on the National Distress and Response System (NDRS) with the following enhancements: interoperability, direction-finding equipment with two degrees of accuracy, enhanced clarity of distress calls, simultaneous channel monitoring, upgraded playback and recording feature for distress calls, reduced coverage gaps, and supporting Digital Selective Calling (DSC). The Coast Guard uses its Homeport website as a “one stop shop” for MS&S info. Access to homeport.uscg.mil is available to anyone who is accepted as a

subscriber. Finally, Interagency Operations Centers provide enhanced opportunity for information sharing in the Maritime Domain. He noted that today the watchstander is the integrator of information from a group of disparate systems, while tomorrow the operator will be the evaluator of the information through such systems as Watchkeeper and ACE. The implementation of integrated operations center concepts as have been completed in Charleston, SC, Houston and Jacksonville.

**CAPT George McCarthy, USN (Ret.)**

Former Director, NMCO

CAPT McCarthy urged attendees to break down the historical information sharing barriers between government and industry, starting with a greater understanding of each other’s responsibilities—whether to the voters or to the shareholders. He also noted that with information technology advancements, it is much easier to share information among and between stakeholders, if both sides trust each other and are more willing to support others’ needs. MDA is a global issue and he encouraged attendees to think in those terms as MDA continues to grow.



**Breakout Sessions**

**1. Ocean Law and Policy**



**Marine Spatial Planning**

Dr. John Oliver,  
USCG Ocean Policy

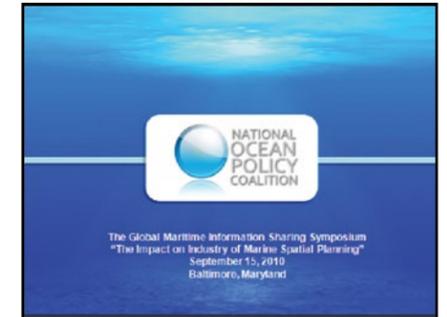
Dr. Oliver presented an overview of the emerging National Ocean Policy implementation plan with an emphasis on the value of Marine Spatial Planning to enhance the nation’s use of the marine environment. Dr. Oliver stressed the positive results that can occur through de-confliction of the ocean strata among varied competing interests.



**The Impact on Industry of Marine Spatial Planning & Ocean Policy**

Mr. Jack Belcher,  
Partner, EnergyNorthAmerica

Mr. Belcher presented the industry’s reaction to pronouncements and perspectives that pose potential economic threats to the marine industry. He catalogued the concerns of his organization, composed of various marine interests, to the emerging policy, such as maritime zoning by governmental entities to limit activities. He stressed the need for better interactions between the government and industry to ensure an approach that can work for all interested parties.



**Piracy Policy & the ‘Redwing Incident’**

Mr. Claude G. Thouret Jr.,  
Chief Operating Officer, Eagle Bulk Shipping, Inc.



Mr. Thouret related his real world experience of trying to comply with the mandates of the recently implemented Executive Order (EO) on Piracy. The EO may prohibit ship owners from paying ransoms to maritime pirates. Additionally, the U.S. Treasury’s Office of Foreign Asset Controls (OFAC) issued a list of Somali individuals and organizations that have been added to its Specially Designated Nationals (SDN) list. U.S. persons are prohibited from having any dealings with persons on the SDN list. He cited the lack of certainty in the government policy as a true hindrance to marine commerce. Although noting that the order is still in the process of full implementation, Thouret voiced frustration over the limited interaction between the government and the industry to clarify issues relating to piracy off the eastern coast of Africa.

**2. Science and Technology**

**Multinational Situational Awareness Within the Extended Maritime Environment (MISA-EM)**

LCDR Alejandro Ameneiro,  
Spanish Foreign Liaison Officer, Spanish Navy  
Joint Concept Development & Experimentation  
US Joint Forces Command, J9

LCDR Ameneiro presented an overview of the MISA-EM pilot program as a model for effective maritime communication that is in essence a virtual collaborative environment. The system has been operating effectively in the Mediterranean as a two year effort with the active participation of nine nations, two NATO organizations and experts from 16 international stakeholder organizations and universities.





**C-Sigma, Collaboration in Space for Maritime Domain Awareness**

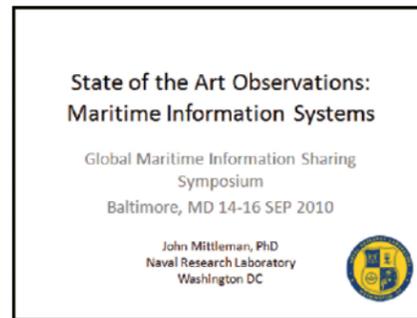
Mr. George "Guy" Thomas  
Science and Technology Advisor  
HQ, USCG

Mr. Thomas presented a recently considered commercial satellite based concept that could enhance global collaboration for MDA by integrating additional space acquired information with that from land, sea and air platforms.

**State of the Art Observations: Maritime Information Systems**

John Mittleman, PhD  
Advisor to the Executive Agent for Maritime Domain Awareness  
Naval Research Laboratory

Dr. John Mittleman of the Naval Research Laboratory culminated the Science and Technology breakout session presentation with a discussion on the general state of maritime information systems. His introduction was a thought provoking discussion focused on the transformation of data (existence) to information (context) to knowledge (reason) and ultimately to understanding (foundation for command). He asserted that while we excel at the first two steps and perform reasonably well on the third, it is in the conversion to understanding that the U.S. should improve. He then highlighted several technological approaches to improving MDA.



**3. Regional and Global Collaborative MDA**

**European Union Maritime Information Sharing**

VADM Ferdinando Sanfelice di Monteforte, Italian Navy (Rtd.)  
The Wise Pen Team, European Union



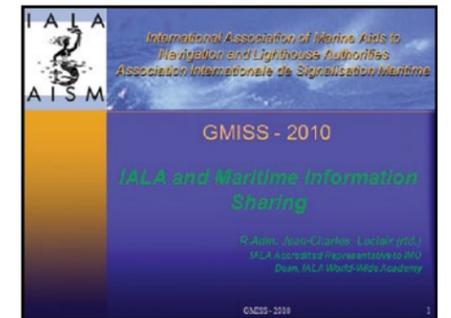
VADM Monteforte explained that the EU approach to issues is: 1. to build consensus, 2. to work issues from the bottom up, 3. recognize that the way ahead may be at an uneven pace, and 4. that there are two poles in the EU, the EU COUNCIL (Member States) and the EU COMMISSION (treaty Enactment). He explained that several major decisions had been made. The EU had agreed to an Integrated Maritime Policy, to implement pilot projects on a regional basis, and most importantly as far as a roadmap was concerned, to a common information sharing environment. While challenges remain, they have made progress toward an information sharing environment.



**International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) and Maritime Information Sharing**

RADM Jean Charles Leclair, French Navy (Rtd.)  
IALA Representative to the International Maritime Organization

RADM Leclair highlighted that IALA has been involved in maritime information sharing since its inception. Information sharing is what has made international maritime trade possible and so successful. For IALA, information sharing is essential. He discussed the IALA-Net, which was set up and run by IALA. This system includes maritime traffic monitoring, various VTS's around the world, AIS tracking and LRIT. This can and should be part of the global MDA system.



**European Union Regional Approach to Information Sharing**

VADM Patrick Hebrard, French Navy (Rtd.)  
The Wise Pen Team, European Union

VADM Hebrard emphasized that the challenge is to move from a "need to know" approach to information sharing to a "responsibility to share" approach. To obtain this we will need a top down approach with a lot of political will. He emphasized that most demand for this information is at the regional and local level, and he highlighted the three pillars to developing an integrated maritime policy for the European Union are Governance, Surveillance and Knowledge.



**4. A Process for Change: Improving Information Sharing from the Port Up**

**Maritime Information Sharing Taskforce**

Ms. Wendy Walsh  
U.S. Naval Postgraduate School, Monterey, CA

Ms. Walsh presented an update on the Maritime Information Sharing Taskforce (MIST) project, which has been on-going since 2008. The project seeks to facilitate maritime information sharing, at a local level, through a forum for mutual problem solving and a structured process for two-way sharing of threat information. Three ports have participated in MIST projects (Los Angeles/Long Beach, CA; Puget Sound, WA; Honolulu, HI) with the fourth set to start (Delaware Bay, PA). The three pilot projects so far have produced valuable information regarding:



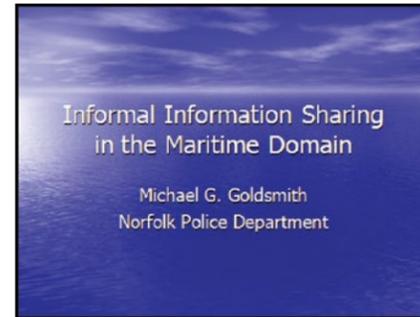
- Facilitation of private sector participation through alignment of regulations with business practices,
- Incentives to foster information sharing among/between stakeholders,
- Ensuring sustainable value accrues to participants,
- Classification issues that inhibit information sharing,
- Technology efficiencies



**Information Sharing in the Maritime Domain**

Captain Mike Goldsmith  
Norfolk Police Department

Captain Goldsmith presented an effort in Norfolk, VA to explore and improve local information sharing among and between maritime stakeholders. Emphasis is placed on personal relationships between stakeholders and a large reliance is placed on social networks to share information. MDA within this sphere is informal in nature, but highly efficient, as largely only information that is relevant is passed. Emergency responses have already shown the value of this local, informal MDA



**Promoting Collaboration and Information Sharing between Local Maritime Stakeholders**

Detective Candice Wright  
Long Beach Police Department

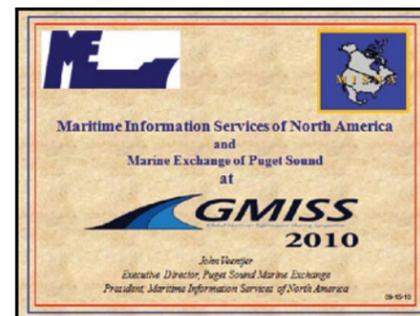
Detective Wright presented another informal MDA network that has emerged in the ports of Long Beach, and Los Angeles, CA. Drawing on MIST principles, stakeholders in the public sector have collaborated with their private counterparts to create an information sharing and intelligence dissemination cyber network (Regional Public Private Information Communication System) in conjunction with the local FBI Infrastructure Liaison Officer. The Seaport Environment Awareness Common Operating Picture (SEACOP) between law enforcement agencies provides a platform for agency participants to share situational awareness during planned events, actual incidents or suspicious activity. The Information Communication System urges stakeholders on both the public and private sector side to analyze and convey their information needs.



**Maritime Information Services of America**

Mr. John Veentjer  
Puget Sound Marine Exchange

Mr. Veentjer presented a currently workable local MDA through formal, subscription services via the Puget Sound Marine Exchange and other marine exchanges throughout the country. Marine exchanges are plugged into the AIS networks, but also validate scheduled arrival times of vessels with updates on their actual arrival and departure. The marine exchange has both public and private sector customers, and provides communications and other local port support activities for its members. It maintains a valuable database of vessel movements in a particular area, a treasure trove of information for safety, security, and environmental risk management. At their core, marine exchanges are information brokers between public and private suppliers and public and private customers.



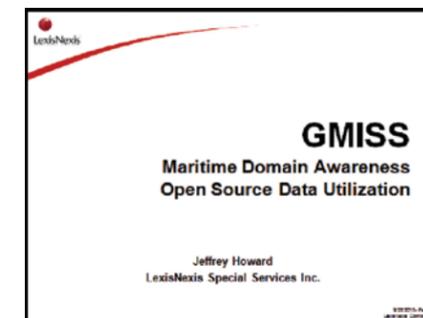
**Mr. Orlando Gotay – Luncheon Address  
Deputy Maritime Administrator  
MARAD**

Mr. Gotay delivered a luncheon address that stressed two key points:  
1. the Maritime Administration's role is that of a strong advocate for the maritime industry - from ship building to ship operation and everything in between; 2. the Maritime Administration is not a security provider. He pointed out that they use their unique position as a regulator to provide the link between government and industry on both the national and international levels.



As such MARAD feels they serve as a catalyst among government and maritime interests to achieve the common objective of obtaining and sharing information to enhance commerce while providing a secure and reliable maritime transportation system. He highlighted the MarView program as an example of making information available to both government and industry. It is an internet-based portal that provides essential information about the condition and performance of the marine transportation system. More to the theme of GMISS he emphasized that MarView includes input from interagency and private sector partners to display global vessel tracking, status of inland waterway locks, and crisis status, such as the oil blowout in the Gulf of Mexico.

**Mr. Jeffrey Howard – Dinner Address  
Director of Enterprise Programs  
LexisNexis Special Services  
Gala Address**



Mr. Howard pointed to LexisNexis' approach to data management as a possible solution to the MDA information data sharing conundrum. He highlighted the very successful FBI program to locate and return missing children. He stressed the need to understand what data is out there already, manage it well in order to make MDA work. His business model was to learn from other successful enterprises to construct a successful MDA information sharing model. He closed by further urging consideration of ways to incentivize industry cooperation, such as a reduction in insurance rates.



*Appendix D.*  
***GMISS 2010, Thursday, Sep 16th – Plenary Session – Presentations and Speech***

(Please note that only summaries are included in this document, but complete presentations or speech text can be found on the included CD.)



**Ms. Donna Hopkins**

Department of State  
Maritime Security Sector Reform (MSSR)



Ms. Hopkins from the State Department kicked off the morning session with an overview of Maritime Sector Security Reform, which is an emerging program initiated by USAID. She explained that international work on Security Sector Reform (SSR) has been undertaken by the United Nations, the Organization for Economic Cooperation and Development (OECD) and in National policy and program activities. SSR consists of the set of policies, plans, programs, and activities that a government undertakes to improve the way it provides safety, security, and justice. In applying the SSR approach to the maritime sector, the lack of a diagnostic tool to produce baseline analyses of the national maritime sector was identified

as a significant gap. Accordingly USAID and the DoS have applied SSR concepts to the maritime sector including the critical interdependent elements of governance, civil and criminal authority, defense, safety, response and recovery, and economy. Once field tested and adopted (now underway) she shared that the MSSR framework will:

- Provide a system-wide basis for analyzing regulatory, operational and institutional policies and functions required for maritime security with capabilities assessed by Approach and Delivery
- Enable development of national (self-assessment) and/or collaborative (joint assessment) understanding of where resources may best be targeted to improve specific aspects of a country's national maritime sector
- Provide consistent measurement criteria over time for comparative analysis
- Permit identification of gaps in key functions and capabilities through sector-wide and cross-sector approach, and
- Facilitate coordination to avoid duplicative efforts, including use by regional and international organizations.

**Summary of Working Group Findings**

C&H Global Security  
VADM (Ret.) James Olson  
Mr. Mark Johnson  
Mr. John Gaughan  
Mr. Howard Kympton

As facilitators for the four breakout sessions held on Wednesday afternoon, the members of C&H Global Security presented an overview of each group's key concerns with the questions that the working groups had been charged to develop for the Senior Executives Discussion to follow. Several themes were consistent across all of the working groups:

- Transparency and Trust
- A desire for tangible, visible progress
- Focus on the right perspective



- Engaging industry/fostering partnerships globally
- Government policy or actions contrary to the spirit of information exchange
- The need for an MDA "roadmap" – both domestic and global
- The desire for an information "exchange" at regional and global levels

**Flag Panel Discussion**

**Moderator: Mr. David A. DellaVolpe, Chairman of the Naval War College War Gaming Department**

Panelists:

RADM Kevin Cook, U.S. Coast Guard, Director of Prevention Policy  
RADM Mark Buzby, U.S. Navy, Commander, Military Sealift Command.  
RADM Jeffrey Lemmons, U.S. Navy, OPNAV Director for International Engagement  
RDML Dan Abel, U.S. Coast Guard, NORTHCOM Deputy Director of Operations  
Mr. Joe Byrne, Department of Transportation Executive Agent for MDA

Each of the previous day's work group facilitators presented a brief summary of the breakout and work group discussions, followed by the questions for the Flag Panel that were developed through the work group discussions. While covering a broad spectrum of MDA issues and concerns, the questions highlighted several points of discussion including trust, the complexity of the various MDA information aspects, the impacts (both anticipated and unanticipated) of single nation decisions in a multi-national industry, and the overall strategic direction for MDA. The discussions were wide ranging but offered both the panelists and the audience the opportunity to make their issues and concerns known.



**VADM David Dorsett, USN**

Deputy Chief of Naval Operations for Information Dominance  
Director of Naval Intelligence  
Closing Remarks

VADM Dorsett noted that collectively developed solutions to the problems that vex MDA's progress, will be far better than individually developed solutions. From the U.S. Navy's perspective, information sharing—the heart of MDA—is a strategic imperative because the Navy is transforming from a platform-based Service to an information-based Service. Transformational leadership demands new thinking, new collaborations—based on trust of the other party. The CNO has charged the Service to create new concepts that accelerate information advantage. Attendees are faced with similar dilemma: how to turn the change in information capabilities into the change in information sharing capabilities.