



At DoDIIS 2016 we had the chance to hang out with some of the Great Americans from the old days of Naval intelligence and the genial inter-agency Usual Suspects. Joe Mazzafro took detailed notes, and led one of the break-out sessions. His observations are incisive as always, and help to inform the debate about what is happening with Big Data in the government sector and where the Community is going.

Here are his views:



DODIIS 2016 OVERVIEW

DoDIIS Worldwide Conference 2016 convened in Atlanta, Georgia from 31 July to 03 August at the Georgia World Congress Center. The theme for DoDIIS 2016 was “Mission Integration at the Speed of Operations.” The conference drew 200 exhibitors (230 in 2015) and 2300 attendees (1600 in 2015). Less than 400 participants were government “blue badgers” of which only 90 were from DIA. The entire agenda for DoDIIS 2016 was UNCLASSIFIED. The following are my recollections, observations, and commentary based on what I heard and saw at DoDIIS 2016 with **my personal views appearing in bold font**. Where available I have also included URL links to media reporting DoDIIS agenda items

DNI James Clapper, DIA Director Lt Gen Stewart and USDI Marcel Lettre were all restrained in

their comments and collectively seemed to be intent on making “no news” at DoDIIS. They made no projections regarding even near term events involving the Intelligence Community.

The three Combatant Commander, Gen McDew (TransCom), Admiral Harris (PACOM), and Admiral Haney (StratCom) all spoke about the importance of information to executing their mission responsibilities, but only Admiral Harris spoke directly to the utility of DoDIIS. Admiral Harris was speaking for all his fellow Combatant Commanders (CoComs) when he said intelligence needs to be pared down to what I need to know about a subject/issue, in a time frame that allows for action to be taken, is in a format that is easy to consume, and is shareable

The IC CIO Panel, which I moderated, was upbeat both about where IT is in the IC and where it is heading. Particularly in the breakout sessions, however, I detected subtle sense of moderating expectations for ICITE, where no metrics, schedule, or cost issues were discussed

FIVE IMPORTANT QUOTES FROM DODIIS 2016

- “We are in age of expeditionary intelligence! Places not bases.” Sean Roche CIA Associate Deputy Director for Digital Innovation
- “Stop forging a new path with an old map.” Janice Glover-Jones DIA CIO
- “The IT Enterprise is under near continual attack: Colonel Bruce Lyman CIO Air Force ISR
- “The world still calls 1600 Pennsylvania Avenue.” US Transportation Command Commander Air Force General Darren McDew
- “DoDIIS is the backbone for Combatant Command decision making.” US Pacific Command Commander Admiral Harry Harris

INSIGHTS ON ICITE

- NSA will be primarily a user of its own GOV Cloud for mission, which it is funding predominantly without Intelligence Community (IC) augmentation. This is because most NSA’s mission workloads are not supported by Commercial Cloud Services C2S and run 24 x 7 so there is no cost advantage associated with elasticity.
- DTE II is several months behind schedule due to testing; rollout schedule for FY 17 not firm yet but DIA and NGA will be refreshed with DTE II in FY 17
- Migration plans to ICITE (like technical roadmaps) are the responsibilities of the individual service providers and their contractors. **There is no consolidated ICITE migration plan**
- IC CIO’s all agree that there is no realistic alternative to ICITE

PLENARY SPEAKERS

1. DIA CIO Janice Glover Jones

- a. Data centricity is about making data more available, useful, and valuable
- b. Shift IT to a managed service model to achieve:
 - i. More automation
 - ii. Empower users to be less reliant on IT organizations for common actions and services
 - iii. Improve access to data, tools, and services
- c. The threats to national security demand IT providers:
 - i. Think disruptively
 - ii. Provide seamless connectivity and access
 - iii. Make IT more interactive

2. DIA Director Lt Gen Vincent Stewart (USMC)

- a. Moving to contact is becoming increasing obsolete on the modern battlefield because it

is ineffective in the information age. The fight is shifting from the kinetic to the cognitive

- b. Digital transformation enable by ICITE will change work flows and outputs
- c. Key metric of success is ICITE enabling analyst to spend more time using data than collecting and aggregating it
- d. Envisioned End State: cognitive advantage over our adversaries that provides policy makers and military commanders more “decision time”

3. DNI Jim Clapper

- a. ICITE is delivering on intelligence integration at the speed of operations, **but offered without any specific examples**
- b. ICITE is neither the cause of nor the solution for all IC issues and challenges

4. USDI Marcel Lettre

- a. US advantages
 - i. Jointness
 - ii. Industrial base
 - iii. Workforce talent and dedication
- b. Issues for defense intelligence
 - i. Supporting the 3rd Offset Strategy with deep understanding of the adversary’s capabilities and intentions
 - ii. Coupling innovation and IT enterprise integration
 - 1. Taking mission advantage of ICITE capabilities
 - 2. Bringing Activity Based Intelligence (ABI) to the Joint Information Enterprise (JIE) environment
 - iii. Leveraging the industrial base for state of the art capabilities for sensors and information management

5. FFC CIO Dr. David Bray

- a. Advances in “bio” are likely to overshadow what we are currently seeing in IT and cyber
- b. IPV-4 is at capacity; with the shift to IPV-6 data and connectivity will expand exponentially where today’s IPV-4 information environment is represent by a “beach” ball the IPV-6 environment will be the size of the “Sun”
 - i. This means more change in the next 7 years than we have seen in the last 20 years
 - ii. Man in the loop IT will be increasingly less effective as data volumes, variety and velocity increase beyond human capacity to grasp and understand

6. OPM Director Beth Cobert

- a. Talent recruitment and retention is an OPM priority
- b. OPM is in the process of establishing qualifications and credentials for various categories of cyber professionals
- c. Background Investigation Improvements
 - i. In the process of hiring 400 additional investigators
 - ii. Expanding IT capacity
 - iii. Developing continuous evaluation process

Ms Cobert was silent on when security background investigations could be completed in 120 days and most of the audience did not appreciate her not talking more about why and how the OPM security records breach occurred or the impact that has on those working in the IC

http://www.nextgov.com/cybersecurity/2016/08/what-opm-can-learn-pentagon/130532/?oref=nextgov_defense_it

7. NCTC Director Nicholas Rasmussen

- a. Users will adopt ICITE faster if ICITE capabilities can be related mission specific scenarios
- b. NCTC migration to ICITE is in progress, **but no schedule, issues, or lessons learned were offered**

8. CIO Air Force ISR Colonel Bruce Lyman

- a. Opened with the assertion that “IT enterprises are under near continuous attack” and effectively used “Norse’s Attack Map” (<http://map.norsecorp.com/#/>) to visually make this case
- b. Current AF ISR CIO lines of effort:
 - i. Optimizing the Air Force’s ISR enterprise
 - ii. Insuring the cyber security and resiliency of the ISR enterprise
 - iii. Leveraging DoD and IC capabilities
- c. Clearances make fighting on JWICS a serious challenge
- d. Operational effectiveness is what will drive Air Force adoption of ICITE

9. NIO for Technology Dr Thomas Campbell discussed technologies that the IC must be alert to adversaries developing for an advantage over the US and should be taken advantage of by the IC in order to provide more mission capabilities

- a. Weaponization of “bio editing” particularly for genetics (DNA and RNA)
- b. Additive Manufacturing (3D Printing) and programmable matter (4D Printing)
- c. Augmented and Virtual Reality
- d. Machine Learning (MR) and Artificial Intelligence (AI)
- e. Human Intelligence Amplification

10. CIA Deputy Associated Director for Digital Innovation Sean Roche

- a. “We are in an age of expeditionary intelligence!” This means “places not bases” **which I took to mean the growing importance of mobility for intelligence to be relevant going forward**
- b. For the IC IT is not a service; rather, it is mission
- c. The IC needs to build around data vice the current acquisition focuses on procuring on hardware/software, services, and staffing. The IC should look at IT contracting in terms of a continuous operations and maintenance (O&M) model based on tech insertion and continuous improvement
- d. While we are not on the edge of a cyber Armageddon, Cyber Security matters and the IC needs to be able to support: defense, attribution, resilience, and response in this domain

11. <http://www.c4isrnet.com/story/military-tech/it/2016/08/02/cia-it-service/87954310/>

12. US Transportation Command Commander AF General Darren McDew

- a. “The world still calls 1600 Pennsylvania Avenue” when there is a crisis
- b. “Unless someone like you cares a whole lot, nothing is going to get done!”
- c. Contested mobility is the future TransCom faces and it needs the IC to help protect America’s military transportation resources
- d. “Don’t chase efficiencies at the expense of effectiveness”

13. FBI Executive Assistant Director Information and Technology Branch James Turgal discussed the FBI’s current strategy for combating terrorism:

- a. Focus on the facing threats
- b. Shrink the threat domain
- c. Impose costs on those involved with terrorism
- d. Help state and local law enforcement
- e. Encourage IC and private sector cooperation and information sharing

14. US Pacific Command Commander Admiral Harry Harris

- a. DoDIIS is the backbone for CoCom decision making, but don't tell me everything you know; rather, focus on what I need to know and provide it in a coherent easy to consume way that is shareable
 - i. IT systems need to be "classification agnostic"
- b. How DoDIIS can improve its value to the Combatant Commands:
 - i. Increase speed of access to data
 - ii. Increase data availability
 - iii. Design and test IT for the operational environment vice just for the IC's Big 5; remember bandwidth is an issue for operating military forces
 - iv. Foreign disclosure needs to be automated

15. Director Cyber Threat Intelligence Integration Center (CTIIC) Tonya Ugoretz

- a. Mission is to coordinate intelligence views on cyber issues
- b. As the newest of seven (7) federal cyber centers CTIIC has focused on building trust; addressing problems with candor, adding value, not protecting authorities, and avoiding any tendencies to "be in charge"

16. US Strategic Command Commander Admiral Cecil Haney

- a. To be of value intelligence needs to be available, predictive, and shareable
- b. Good intelligence generates more knowledge/understanding while building decision time

https://www.stratcom.mil/image_library/events/485/Department_of_Defense_Intelligence_Information_Systems_DoDIIS_Worldwide_Conferen/

17. DoD Oversight Official Michael Mahar previewed for major changes to DoD intelligence policy related to data collection on US persons, which were announced the week after DoDIIS in DoD Manual 524001m

<http://federalnewsradio.com/defense/2016/08/150k-intel-workers-see-changes-data-collection-policy/>

18. IC CIO Panel



- a. Commercial Cloud Services (C2S) will reach 100% capacity in 2017; 1600 developers are now using C2S
- b. ICITE has moved out being in the acquisition phase and is now focused on driving adoption by showing mission value. The IC is too far into the ICITE journey to turn back
- c. IT as a Service/Performance based contracting is not something the IC is comfortable with because the Statement of Work (SOW) must convey in detail what the government is expecting in terms of performance/outcomes and how to value that performance.
- d. Cultural challenges to ICITE adoption and digital transformation
 - i. Developing trust in other agencies through reciprocity to compensate for the loss of control
 - ii. Comfort with the status quo
 - iii. Decoupling control and complexity from effectiveness
 - iv. Understanding risk and opportunity costs

BREAKOUT SESSIONS

1. ICITE from the Beginning to the Future

- a. ICITE is not a program of record but a framework for change composed of a community of service providers and consumers. Guiding principles remain: enabling intelligence integration; enhancing the value of data; and creating IT efficiencies
- b. With most ICITE services at IOC migration to their use is the responsibility of the individual service providers; **however, given the inter-dependency of ICITE services for delivering mission impact the lack of an overarching migration plan is surprising to me**
- c. **There was the usual reluctance to discuss schedule or performance metrics related to ICITE and no opportunities for private sector efforts were identified**

2. **Application Development on the DoDIIS Application Engine (DAE)** breakout session showed how this capability has matured and is able to support apps development for DoDIIS that can be mission ready in six weeks or less
3. **C2S Lessons Learned** seemed generic to any cloud migration but I found “next steps” for C2S interesting
 - a. Self-provisioning of C2S resources
 - b. Implementation of DevOps (though DAE is available now)**
 - c. Post migration cloud optimization
 - d. Refactoring capabilities based on mission priorities
 - e. Maturing the software factory

4. **DIA CIO Division Chiefs**
 - a. What is your current focus?
 - i. James Harris (CTO): Artificial Intelligence (AI) and Machine Learning (ML)
 - ii. Micah Mossman (Business Ops): Learning how to fail well
 - iii. Gerry Brooks (Capability & Integration): documentation and transparency
 - iv. Darren Sawyer (Cyber & Enterprise Ops): Laboratory environment for innovation
 - b. What are the Impediments to DIA becoming Data Centric?
 - i. Darren Sawyer: funding and workforce skills
 - ii. Gerry Brooks: Security and funding
 - iii. Micah Mossman: finding time

CONCLUSIONS/FINAL THOUGHTS

Digital Transformation appears to be the new IT focus area of the DoDIIS Community if not the entire IC's, but if I heard a definition or description I don't remember it. I know there wasn't any discussion at DoDIIS 2016 about a strategy or a plan for how to accomplish a digital transformation within the IC. At this point it is a vision statement to guide planning and decisions

Based on it being declared IOC in advance of a new administration and a new DNI, ICITE is at an inflection point where it has to show value or it will suffer the fate of IC-MAP, Trailblazer, and Geo-Scout. Showing how C2S, GovCloud, DTE, and the Apps Mall can work together to answer IC mission questions quickly and effectively is what will bring users to ICITE as was the case with JDISS, JWICS, and Intelink. The DIA leadership and the IC CIO's at DoDIIS 2016 understand this.

Based on the comments of all three Combatant Commanders who spoke at DoDIIS, shareable intelligence with allied and coalition warfighting partners is an underserved area. Write for release, automated foreign disclosure processes and cross domain security solutions to address the CoCom's demand for shareable intelligence needs to be an agenda item for DoDIIS 2017.

The number of presentations that were centered on cyber showed the growing confluence amongst understanding cyber issues and threats; operating defensively and offensively in the cyber domain and the IC's IT architecture(s) and capabilities. Cloud orchestration, at least between ICITE, JIE and DCGS, but suspect several more clouds as well, is going to be increasingly important for the DoDIIS Community going forward

I was surprised that there was no discussion of by any IC senior speaking at DoDIIS 2016 regarding what are the key issues they need to provide a solid transition plan input on to assist both the new Congress and the new President in January 2017.

I was not surprised that DoDIIS 2016 provided no actionable business opportunities that could be pursued in FY 17 with DIA or other intelligence agencies using the eSITE contract vehicle.

I commend the DIA CIO organization for planning and executing another well run DoDIIS Conference. Despite a presence of only 90, the DIA CIO leadership made a concerted effort throughout DoDIIS 2016 to make themselves available in the DoDIIS Booth, by walking around the Exhibitor Floor and attending virtually all of the conference's social events.

Overall DoDIIS 2016 showed an optimistic industrial base with no shortage of products, solutions, ideas and capacity to bring digital transformation to DoDIIS. On the government side the IC leadership is poised to move forward once it has more clarity regarding the FY 17 budget and guidance from the next administration's Intelligence Transition team.