

New NGA Center Promotes Interoperability

By Denise Perreca

Geospatial intelligence (GEOINT) comes in many forms. Its sources are growing. Its customers are spread across countless time zones. Its makers reside within numerous intelligence entities and federal departments, not to mention each of the military services.

Who's to say one person's GEOINT will look like another's? Who's to say the growing array of GEOINT data, products and services will be even remotely compatible?

The National Center for Geospatial Intelligence Standards (NCGIS)—that's who.

Operational since Oct. 1, 2003, the Center is charged with identifying, advocating and promulgating geospatial intelligence standards and putting in place management processes and policies to promote interoperability and operational efficiency across the National System for Geospatial-Intelligence (NSG).

NGA Director retired Air Force Lt. Gen. James R. Clapper Jr. authorized the establishment of the Center to meet his responsibilities as functional manager for GEOINT and to support a standards-based approach to transformation of the NSG enterprise architecture. The Center will fulfill the responsibilities described in Department of Defense Directive 5105.60: to prescribe and mandate standards for imagery, imagery intelligence, and geospatial information for all DoD components and the Intelligence Community.

A Community Effort

The Center acts as the focal point for the management of GEOINT

standards activities for both the NGA and NSG community. "The NCGIS is the vehicle to partner with the Community and make interoperability not only a goal, but a reality," said Karen Irby, Director of the NCGIS.

The Center is leading the formation of a new community-wide GEOINT standards working group. It will operate under the umbrella of the Defense Information Systems Agency (DISA) Information Technology Standards Committee (ITSC) and provide a forum for community discussions



and decisions on GEOINT standards. These will be included in the DoD Information Technology Standards and Profiles Registry—formerly known as the Joint Technical Architecture.

Examples of GEOINT Standards

Community-wide GEOINT standards will govern such things as the archival, discovery, retrieval and exploitation of GEOINT, enhancing information sharing and collaboration among geographically dispersed users from various intelligence disciplines. Here are some examples of areas that will fall under Center-established standards:

- Geospatial Intelligence Metadata
- Information Transfer
- Imagery Content and Format
- Geographic Feature Portrayal
- Geographic Feature Encoding

- Geospatial Intelligence Reporting
- Geospatial Reference
- Data Compression

Transforming Standards

The Center is "doing standards" in a new way. It is working closely with enterprise architecture and development teams to ensure use of GEOINT standards that support commercial off-the-shelf solutions. The intent is to move the Agency to a data- and net-centric environment using the best technology that industry has to offer. The NCGIS will adopt and implement standards in a way that aligns with existing internal governance, acquisition and requirements processes.

Representing the NSG Community

As the champion of GEOINT standards, the Center participates in appropriate government and industry forums and other standards development and advocacy activities, both national and international.

Such forums include the International Organization of Standardization and the American National Standards Institute. NCGIS standards experts were instrumental in developing the ISO metadata standard, which will be the basis of future metadata profiles. The Center also supports NATO partners through the Digital Geographic Information Working Group and federal civil agency partners through the Federal Geographic Data Committee (FGDC). NCGIS personnel are currently working with the FGDC Homeland Security Working Group to develop

symbology standards for emergency management.

The Center is also involved with the Joint Interoperability Test and Evaluation Center and is helping in the ongoing evolution of the National Imagery Transmission Format standards for still imagery. In addition, the NCGIS works with ongoing standardization efforts in geographic information systems and related industries to ensure that emerging industry standards and technical solutions support the full range of GEOINT standardization requirements.

Representing NSG requirements and forging partnerships through these and other forums is critical to ensuring the use of standards that will enable the sharing of timely, relevant and accurate geospatial

intelligence. Sharing GEOINT in a networked environment is necessary to fully support the war fighter, the Intelligence Community, U.S. coalition partners and civil agency customers.

Standards for the Future

Standards do not live on forever. As appropriate, they will be sunsetted at the end of their lifecycle. Over time the NCGIS will recognize emerging standards. For maximum interoperability, the focus will be on an open, consensus-based process that keeps pace with new technologies.

To meet these challenges and serve the NSG community, the Center is building a standards organization composed of NGA professionals who will work with other subject matter experts across the NSG. Together they will ensure that GEOINT stan-

dards do indeed live up to the motto adopted by the NCGIS: Standards: the Foundation for Interoperability.

NCGIS personnel are located in Chantilly, Va., and St. Louis. For more information, visit the NCGIS web site at www.nga.mil (select Products and Services/Standards). Or send an e-mail to ncgis-mail@ncgis.mil.

About the Author



Denise Perreca recently retired from NGA as a staff officer in the NCGIS. She currently works for Northrop Grumman/TASC and supports GEOINT standards activities through the Enterprise Engineering contract.

WHAT'S ON YOUR MIND?

Survey Looks for Ways to do GEOINT Better

How can we do geospatial intelligence better? That was the thought behind NGA Survey 2004, which the Director, retired Air Force Lt. Gen. James R. Clapper Jr., introduced with a reference to his Pathfinder column, "On My Mind."

"Now I want to know what's on your mind," he wrote in the e-mail addressed to the entire work force—government and contractor—when he asked them to take the survey.

Since the last work force survey, conducted in 1999, "favorable responses" increased in every category where a comparison was possible, including "customer orientation," "job satisfaction," "work environment" and "leadership." On the other hand, employees who identified themselves in certain occupations (such as cartographers) expressed frustration over how they perceived their careers

were progressing.

Compared to other government agencies, the 2004 survey results showed that NGA does best in the area of "training and development." NGA employees identified their "working environment" as not up to par with their colleagues in other government agencies.

Five categories received favorable responses of 75 percent or better. In the category, "One Agency Focus," 80 percent of employees agreed that management encourages them to work across Directorates, 79 percent rated the Agency's "Customer Orientation" favorably in responding to questions on this topic, and 77 percent agreed that managers recognize and respect the value of human diversity. "Job Satisfaction" was close behind at 76 percent.

Six categories received favorable responses of 60 percent or below. Although employees saw

"Employment Uncertainty" as less of an issue by 21 percentage points, compared to 1999, only 60 percent looked favorably on their employment prospects. "Working Relationships/Teamwork" rated favorably with 56 percent of employees, 55 percent rated their "Performance Management" favorably" and 54 percent rated their "Working Environment" favorably. "NGA Leadership" was rated 21 percentage points higher than in 1999, but only 49 percent responded favorably. "Organization Change," the lowest rated category with a 37 percent favorable response, was a new category, with the responses indicating significant differences among employees about the Agency's operations, culture, goals and objectives. The Agency was created from elements of the Defense Department and Intelligence Community in 1996.

NGA's Human Development

Directorate (HD) is continuing to analyze the massive amount of detail contained in the survey and will make recommendations for "a way forward," Clapper announced. "HD will conduct a series of focus groups and interviews with relevant stakeholders to gain greater insight into your responses and their implications," he added.

The Director promised to get back to the work force by the end of September after the survey results have been analyzed in more detail. He also announced his intention to involve the work force in finding solutions to the problems that "can be fixed" and to make NGA the "employer of choice within the Intelligence Community, if not the entire government."

Another survey will be taken in 2005 in a continuing effort to monitor the Agency's progress as it strives to do GEOINT better.

—Paul Hurlburt