Army Regulation 115–11

Climatic, Hydrological, and Topographic Services

Geospatial Information and Services

Headquarters
Department of the Army
Washington, DC
28 August 2014

UNCLASSIFIED

SUMMARY of CHANGE

AR 115–11
Geospatial Information and Services

This major revision, dated 28 August 2014--

- Updates roles and responsibilities (chap 1).
- Codifies roles and responsibilities for Army geospatial governance frameworks and the development of the Army Geospatial Enterprise (para 1-4).
- Adds roles and responsibilities of the Service Geospatial Intelligence Element and relationship to the Army Geospatial-Intelligence Office (para 1-7).
- Describes the Army Geospatial Enterprise and relationship to the Common Operating Environment (chap 2).
- Updates Commercial Imagery policy (para 3-5).
- Updates all the Headquarters, Department of the Army, Deputy Chiefs of Staff to their current designations (throughout).
- Changes the National Imagery and Mapping Agency name to the National Geospatial-Intelligence Agency (throughout).
- Updates the office symbol, address, and phone number for the Headquarters, Department of the Army, Deputy Chief of Staff, G-2 (throughout).

Headquarters
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Effective 28 September 2014

Climatic, Hydrological, and Topographic Services

Geospatial Information and Services

By Order of the Secretary of the Army:

RAYMOND T. ODIERNO
General, United States Army
Chief of Staff

Official:

GERALD B. O'KEEFE
Administrative Assistant to the Secretary of the Army

History. This publication is a major revision.

Summary. This regulation implements roles and responsibilities on the establishment of an Army Geospatial Enterprise. It revises and updates the geospatial information and services organizational structures, responsibilities, and capabilities, to include requesting National Geospatial-Intelligence Agency products; disposing of materials; and peacetime geospatial support.

Applicability. This regulation applies to the Active Army, Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve.

Proponent and exception authority. The proponent of this regulation is the Deputy Chief of Staff, G–2. The proponent has the authority to approve exceptions or waivers to this regulation that are consistent with controlling law and regulations. The proponent may delegate this approval authority, in writing, to a division chief within the proponent agency or its direct reporting unit or field operating agency, in the grade of colonel or the civilian equivalent. Activities may request a waiver to this regulation by providing justification that includes a full analysis of the expected benefits and must include formal review by the activity's senior legal officer. All waiver requests will be endorsed by the commander or senior leader of the requesting activity and forwarded through their higher headquarters to the policy proponent. Refer to AR 25–30 for specific guidance.

Army internal control process. This regulation contains internal control provisions in accordance with AR 11–2 and identifies key internal controls that must be evaluated (see appendix F).

Supplementation. Supplementation of this regulation and establishment of command and local forms are prohibited without prior approval from the Deputy Chief of Staff, G–2 (DAMI–OP), 1040 Army Pentagon, Washington, DC 201310–1040.

Suggested improvements. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to the Deputy Chief of Staff, G–2 (DAMI–OP), 1040 Army Pentagon, Washington, DC 20310-1040.

Committee management. AR 15–1 requires the proponent to justify establishing/continuing committee(s), coordinate draft publications, and coordinate changes in committee status with the U.S. Army Resources and Programs Agency, Department of the Army Committee Management Office (AARP–ZA), 9301 Chapek Road, Building 1458, Fort Belvoir, VA 22060–5527. Further, if it is determined that an established "group" identified within this regulation, later takes on the characteristics of a committee, as found in the AR 15–1, then the proponent will follow all AR 15–1 requirements for establishing and continuing the group as a committee.

Distribution. This publication is available in electronic media only and is intended for command levels C, D, and E for the Active Army, Army National Guard of the United States, and the U.S. Army Reserve.

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*This regulation supersedes AR 115–11, 10 December 2001.

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Section I
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1–1. Purpose
This regulation establishes Army governance frameworks, policies, roles and responsibilities, and procedures for the geospatial information component for Geospatial-Intelligence (GEOINT).

1–2. References
Required and related publications and prescribed and referenced forms are listed in appendix A.

1–3. Explanation of abbreviations and terms
Abbreviations and special terms are explained in the glossary.

Section II
Responsibilities
Responsibilities are listed in section II of chapter 1 and chapter 2. Army Geospatial Information and Services (GI&S) assists the Army's missions and objectives and executes the Army portion of the DOD GI&S and Army terrain analysis programs. The Army and the National Geospatial–Intelligence Agency (NGA) work together to develop and maintain databases that support Army GI&S. Army geospatial engineer units and activities develop their databases in accordance with geographic areas assigned to their supported commands. Army geospatial engineer units and activities use the Ground-Warfighter Geospatial Data Model (GGDM) and NGA and/or National System for Geospatial-Intelligence (NSG) standards in producing geospatial data.

1–4. Assistant Secretary of the Army for Acquisition, Logistics and Technology
The ASA (ALT) will—

a. Provide general oversight to Commander, U.S. Army Corps of Engineers (USACE) in performing Research, Development, Test, and Evaluation (6.1, 6.2, 6.3 and 6.4 programs) of systems, equipment, procedures, and techniques applicable to GI&S.

b. Provide policy, directives, and guidance to the Army Acquisition Community to ensure successful implementation of the AGE and interoperability among acquisition programs, especially those involving mission command network and systems.

c. Ensure the Army acquisition systems are in compliance with standards and interoperability established by the NSG per direction within Department of Defense directive (DODD) 5105.60.

d. Ensure Army systems comply with Department of Defense instruction (DODI) 5000.56 and document geospatial requirements for acquisition systems in lifecycle mission data plans per DODD 5250.01.

e. Ensure each system requiring unique geospatial information, products, or services that may have an impact on NGA production, consults with the Geospatial Information Officer (GIO) and the Deputy Chief of Staff, G–2 (DCS, G–2) during the requirements definition and all subsequent phases to ensure compliance with DODI 5000.56 (see app D).

f. Provide representation within the Army GEOINT Office (AGO).

g. Serve as a member of the Army Geospatial–Enterprise Governance Board (GGB).

h. Serve as a member of the Geospatial standing task force (GSTF).

1–5. Assistant Secretary of the Army for Installations, Energy, and Environment
The ASA (IE&E), in coordination with the GIO, will provide overall policy and program direction for Army installations.

1–6. Chief Information Officer/G–6
The CIO/G–6 will—

a. Provide architectural standards and policies that ensure synchronization and integration of the Army Geospatial Enterprise (AGE) with the overall LandWarNet (LWN)–Global Information Grid (GIG) requirements to ensure Joint system interoperability.

b. Provide guidance on future architectural and enterprise solutions to the Army GIO as it affects geospatial interoperability and ability to exchange geospatial information.

c. Provide guidance on net–Centric data management to ensure geospatial interoperability with network service centers (NSC).

d. Provide guidance on cross–domain solutions in support of the geospatial interoperability and data sharing.

e. Ensure GI&S systems and data are compatible with overall mission command network and systems as they are developed and fielded.

f. Make an interoperability (including GEOINT) determination for all Army IT and National Security Systems (NSS) before fielding, training, or materiel release. Systems that require joint certification by the Joint Interoperability Test Command (including GEOINT) will coordinate with CIO/G–6, per AR 73–1.

g. Serve as a member of the Army GGB.

h. Serve as a member of the GSTF.

1–7. Deputy Chief of Staff, G–2

The DCS, G–2 will—

a. Serve as the Service Geospatial–Intelligence (GEOINT) Element (SGE) to perform the duties listed in DODD 5105.60, in direct coordination with the GIO.

b. Serve, in accordance with DODI 3115.15, as the Army central point of contact for GEOINT and coordinate all GEOINT issues with the NGA, the other Services, the Joint Staff, the Intelligence Community (IC), and other members of the National System for Geospatial–Intelligence (NSG)/Allied System for GEOINT (ASG) as appropriate. The DCS, G–2 will prioritize the geospatial information component of GEOINT in direct coordination with the Army GIO.

c. Monitor GEOINT support by DOD agencies.

d. Represent the Army, in coordination with the Chief of Engineers, on the National System for Geospatial-Intelligence Senior Management Council (NSMC) and provide a representative to the GEOINT Committee and other NSG subcommittees.

e. Develop Army GEOINT policy and prepare and coordinate Army positions on Joint actions and documents affecting GEOINT.

f. Serve as the Army voting representative to the NSG GEOINT Standards Working Group (GWG).

g. Coordinate and develop the Army position on reviews for—

(1) National System for Geospatial–Intelligence (NSG) standards specifications, performance specifications and extraction guidance documents.

(2) NGA standard and prototype GEOINT products and services to include sunset positions/recommendations.

(3) MOAs, MOU, IA, and MIPR Agreements between the Army and NGA.

h. Identify, validate, and coordinate priorities for—

(1) Army Service geographic area requirements for GI&S products to support training, exercises, system development and deployment readiness, excluding requirements managed by the Combatant Commands (CCMDs) to support operational needs (in accordance with Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3901.01).

(2) Each system requiring unique geospatial information, products, or services that may have an impact on NGA production. Consult with the U.S. Army Training and Doctrine Command (TRADOC) Capabilities Manager (TCM) Geospatial and the USACE Army Geospatial Center (AGC) during the annual Army GI&S Requirements Statement to NGA process and all subsequent phases to ensure compliance with DODI 5000.56 and DODD 5250.01.

i. Submit geospatial production requirements to supporting agencies for production. This includes submitting prioritized Army Service non–standard geospatial production requirements to the Chief of Engineers for execution. Requirements will be coordinated with U.S. Army Forces Command (FORSCOM), TRADOC, and Deputy Chief of Staff, G–3/5/7 (DCS G–3/5/7) for a requirements determination review.

j. Establish and maintain an AGO to serve as the SGE representative at NGA Headquarters. The AGO will—

(1) Serve as the DCS, G–2 cell within the NGA providing the on-site SGE presence at NGA to provide representation, coordination, liaison and interface on Army GEOINT issues and actions. Areas of interaction may extend to policy, plans, programs, requirements, capabilities, operations, exercises, architectures, training and functional management applicable to integrating Army and NGA activities.

(2) Convey SGE coordinated positions on NGA programs and activities that require Army visibility and engagement.

(3) Serve as the conduit between the Army and NGA. All Army activities will coordinate engagements with NGA with the AGO. Additionally, NGA will leverage the AGO to coordinate the spectrum of GEOINT related activities with the Army.

(4) Promote and facilitate engagement between Army GEOINT stakeholders and NGA, NSG, and ASG counterparts for the purpose of integrating, leveraging and contributing GEOINT capabilities.

k. Ensure U.S. Army Intelligence and Security Command (INSCOM) executes the following tasks. INSCOM will—

—

(1) Serve as the lead manager for execution of GEOINT Foundry programs including the Geospatial component.

(2) Provide representation in the AGO.

(3) Promote the integration of the complementary capabilities of the GPC and theater military intelligence (MI) brigades to optimize GEOINT support to the ASCC.

(4) Collaborate with the Army Geospatial Center to ensure synchronization of GEOINT-related initiatives.

l. Co–chair, with the Chief of Engineers, the Army GGB.

m. Serve as a member of the GSTF.

1–8. Deputy Chief of Staff, G–3/5/7

The DCS, G–3/5/7 will—

a. Resource geospatial troop organization, force structure, operations, training, and readiness.

b. Prioritize all materiel programs supporting the geospatial architecture, in coordination with ASA (ALT) and the Deputy Chief of Staff, G–8 (DCS, G–8).

c. Assist the DCS, G–2 in monitoring geographic priorities requiring geospatial support as determined by CCMDs and intelligence agencies when in support of CCMD requirements.

d. In conjunction with the GIO, determine requirements for GI&S support to Army aviation, Air Traffic Control, Army Airfields or Heliports (AAF/AHP), and Airspace Operations through the U.S. Army Aeronautical Services Agency and provide to DCS, G–2.

e. Assist the GIO in developing and implementing the AGE through the integration of AGE capabilities in Mission Command, Intelligence, Networks, Training, Modeling and Simulation (M&S) and Common Operating Environment to ensure system interoperability between and among the Operating and Generating Forces.

f. Coordinate all GI&S requirements with the GIO and all IGI&S with ACSIM.

g. Exercise overall supervision, direction, and management oversight for the Sustainable Range Program (SRP) per AR 350–19. Specific responsibility for SRP will reside with the G–3, Chief, Training Support Systems Division (DAMO–TRS) who will—

(1) Serve as the HQDA functional proponent for SRP and its core programs.

(2) Resource the SRP Geographic Information System (GIS) Program.

(3) Collect, validate, and prioritize SRP GIS requirements and forward these requirements to DCS, G–2 for submission to the NGA or the AGC, as appropriate.

(4) Develop strategic direction and guidance for SRP GIS across the Warfighter Mission Area Training Domain.

(5) Formulate policies and issue administrative programmatic guidance and instructions for implementing and sustaining the core programs within Army commands (ACOMs), Army Service Component Commands (ASCCs), and direct reporting units (DRUs).

(6) Coordinate matters affecting and/or related to the SRP and its core programs with the Army Staff (ARSTAF), the Army Secretariat, the Office of the Secretary of Defense, the Joint Staff, and appropriate Navy, Air Force and Marine Corps commands when required.

(7) Provide policy direction to TCM Live and coordinate with the Army Geospatial Center during drafting of the annual Army GI&S Requirements Statement to NGA and during all subsequent phases to ensure compliance with DODI 5000.56 and DODD 5250.01.

(8) Promote the sharing of SRP GI&S data.

h. Serve as a member of the Army GGB.

i. Serve as a member of the GSTF.

1–9. Deputy Chief of Staff, G–4

The DCS, G–4 will—

a. Serve as the Army Staff central point of contact for supply and storage of geospatial material.

b. Assist the Army Staff, in collaboration with the Combined Arms Support Command (CASCOM) and the U.S. Army Materiel Command (AMC), to identify, track and monitor logistics concepts, policy, funding and distribution funding for the Logistics Business and Warfighting Domain requirements that may have GI&S application.

c. Maintain liaison with the Defense Logistics Agency (DLA), the U.S. Transportation Command (TRANSCOM) and other DOD agencies on geospatially-related logistics concepts, policy, requirements, funding, life cycle planning and applications. This will include supply distribution guidance for standard GI&S products as appropriate.

d. Maintain liaison with CASCOM and DLA to ensure that GI&S are integrated into the Army supply system, Army supply officer, and/or supply point of contact processes and procedures and in accordance with DLA mapping and customer guidance.

e. Serve as a member of the Army GGB.

f. Serve as a member of the GSTF.

1–10. Deputy Chief of Staff, G–8

The DCS G–8 will—

a. Develop, independently assess, integrate, and synchronize materiel solutions in order to achieve the AGE.

b. Ensure GI&S systems are appropriately resourced to ensure the successful integration of the interoperability among Army systems and networks.

c. The Director, Center for Army Analysis serves as the Army Senior Modeling & Simulations Advocate and is

responsible for coordinating issues with the DCS, G–2; GIO; and DCS, G–3/5/7 to ensure data sharing and/or reuse between the operational and generating force while providing the Army with a "train as you fight" geospatial environment.

d. Serve as a member of the Army GGB.

e. Serve as a member of the GSTF.

1–11. Chief of Engineers

The COE, in the role as Topographer of the Army will—

a. Serve as the designated Operational Engineering Capability Area Manager, which is comprised of General Engineering, Combat Engineering and Geospatial Engineering.

b. Represent the Army, in coordination with the , G–2, on the National System for Geospatial-Intelligence (NSG) Senior Management Council (NSMC), and provide a representative to the GEOINT Committee

c. Co–chair, with the DCS, G–2, the Army Geospatial–Enterprise Governance Board (GGB).

d. Administer and facilitate the development and implementation of an Army Geospatial Enterprise, in coordination with DCS, G–2; DCS, G–3/5/7; CIO/G–6;ASA (ALT); U.S Army Training and Doctrine Command (TRADOC); Army Capabilities Integration Center (ARCIC); and other key stakeholders, which enables interoperability across Common Operating Environment Computing Environments, echelons, National Geospatial-Intelligence Agency (NGA), other Services, and Joint, Interagency, Intergovernmental, and Multinational (JIIM) partners.

e. Appoint representatives to serve as the following:

(1) Army GIO and/or Deputy Topographer of the Army.

(2) Executive officer to the GIO.

(3) Management Decision Evaluation Package (MDEP) manager for EMAP.

f. Serve as primary point of contact to the HQDA Staff for the following:

(1) All field GI&S matters.

(2) All U.S. Army Engineer School (USAES) GI&S matters.

(3) All U.S. Army Corps of Engineers (USACE) GI&S matters.

(4) Providing GI&S advice and technical support.

g. Provide resource management oversight of the MDEP EMAP to ensure the program delivers full spectrum geospatial support to the Army by providing the field with specific geospatial information, products, services, and geospatial engineering support. Support from the program will also include support to Army Mission Command networks and systems, Army Force Generation (ARFORGEN), mission planning, training, rehearsal, M&S, National and natural crises, and emergency operations.

h. Validate and prioritize GI&S requirements, per CJCSI 3901.01, then forward to the DCS, G–2 for submission to NGA.

i. Coordinate the execution of Army GI&S requirements with USACE.

j. Support DCS, G–2 with coordinating and developing the Army position on reviews for:

(1) NSG standards, specifications, performance specifications and extraction guidance documents.

(2) NGA GEOINT products and services to include sunset positions and/or recommendations and prototype.

(3) Memorandum of agreements (MOAs), memorandum of understandings (MOUs), military interdepartmental purchase requests (MIPRs), and information assurance (IA) agreements between the Army and NGA.

k. Serve as a member of the GSTF.

1–12. Commander, U.S. Corps of Engineers

The COE, in the role as Commander, USACE will—

a. Provide technical advice on GI&S matters to the regiment.

b. Provide geospatial engineer support to military operations, humanitarian assistance and disaster relief mission, and other missions.

c. Produce and provide standard and specialized terrain analysis products required by the Army, which are not produced by NGA or other agencies, according to DCS, G–2 and the Chief of Engineer priorities.

d. Disseminate the standard and shareable geospatial foundation, in mission ready formats, to mission command systems within required timeframes.

e. Manage and integrate Service-generated geospatial information into NSG data holdings for further dissemination to the DOD, IC and coalition partners.

f. Resource, manage, and execute the multidisciplinary Water Detection Response Team (WDRT) as well as the Water Resource Database that contains information on the location, quantity, and quality, of land-based surface, ground, and existing water facility features to support DOD water resource logistics requirements.

g. Develop, acquire and field geospatial systems and capabilities in support of the Warfighter, while managing technology integration, prototyping and demonstration programs.

h. Conduct geospatial RDT&E focused on Army Science and Technology Priorities and resolving critical enterprise gaps to maintain a strategic and technical advantage.

i. Provide geospatial domain expertise to the Army Acquisition Community in the areas of: systems engineering; architectures; data modeling and standards; common application and/or service identification and development; integration expertise; experimentation; coordination of Army external geospatial interfaces; technology assessments and trade studies; and the shaping of industry and insight on trends.

j. Implement and utilize an enterprise tasking management, tracking and dissemination system for all GEOINT and GI&S requests for information.

1–13. Assistant Chief of Staff for Installation Management

The ACSIM will—

a. Serve as the Army proponent for Installation GI&S (IGI&S) policies, programs, production, and requirements.

b. Provide policy, directives, and guidance to the ASA (IE&E) domain for executing IGI&S programs with appropriate geospatial standards and protocols to ensure successful integration with the AGE.

c. Coordinate IGI&S activities with the GIO.

d. Coordinate IGI&S acquisition strategy with the GIO to ensure compliance with established Joint GI&S standards, architectures, network environments and the Common Operating Environment (COE).

e. Serve as the Army voting representative to the Spatial Data Standards for Facilities, Infrastructure and Environment (SDSFIE) Working Group.

f. Provide IGI&S advice and technical support to the HQDA Staff.

g. Provide metadata records for IGI&S data to USACE for inclusion in the AGC Geospatial Information Library.

h. Promote the sharing of IGI&S data.

i. Serve as a member of the GSTF.

1–14. Army Geospatial Enterprise units, roles, and missions

For echelons below the HQDA level, see Army Geospatial Enterprise-specific responsibilities in chapter 2.

Chapter 2
The Army Geospatial Enterprise

Section I
General

The Army Geospatial Enterprise (AGE) is an integrated system of technologies, standards, data, and processes that provides the geospatial analysis and visualization capabilities needed to deliver geospatial knowledge to the Soldier. The COE implementation plan geospatial appendix defines how the AGE will be architected, implemented, integrated, governed, and verified within the COE.

2–1. Purpose

a. The AGE is central to the military decision-making process due to its ability to enable the visualization of a wide variety of data into the context of place and time. It is a cross-cutting capability, applying to all warfighting functions (WfF), across both the Operating Force and the Generating Force. As a component of the Army Enterprise Architecture (AEA) and the National System for Geospatial-Intelligence (NSG), the AGE is designed to enable Army operations and unified mission command, as well as provides shared situational awareness between U.S. and coalition elements, through standardized geospatial information collection, management, analysis, visualization and dissemination.

b. It delivers critical geospatial information through state-of-the-art geospatial capabilities. Geospatial data will be built once, made available to the soldier through the AGE and utilized many times. The benefits of this approach are increased efficiency, reduced duplication, minimized overhead leading to reduced costs, improved efficiency and effectiveness and interoperability among its elements and synchronization with the Joint, Interagency, Intergovernmental, and Multinational (JIIM) community (particularly with ground forces).

c. Additionally, the AGE enables horizontal and vertical dissemination, exchange, and synchronization of geospatial information between echelons; improves continuity of operations during unit Relief in Place and/or Transfer of Authority (RIP/TOA); enhances and extends NGA's data holdings with Army-produced operational and tactically relevant geospatial information; enhances Soldier situational awareness and leads to information superiority; improves the commanders' military decision-making process (MDMP) and ultimately improves the probability of mission success.

d. Implementation of the AGE eliminates the need to repeatedly collect and produce geospatial data sets over the same geographic area. This improves the transfer of data between unit rotations during RIP/TOA and produces tangible cost savings to the Army due to increased data reuse and data sharing through more effective and efficient information

business processes. Ultimately, the AGE will improve the Commander's Military Decision-making Process, leading to Information Superiority, enhanced Soldier situational awareness, and will be a fundamental tool for assuring a common understanding between the Army, the Intelligence Community, and JIIM partners.

2–2. Scope

This section is applicable to any and all producers and consumers of geospatial information or geospatial applications, systems, programs of record (PORs) and non-PORs, activities, people, or processes that have geospatial requirements, capabilities or functions within the Operating and Generating Forces. The AGE includes all ARSTAF, activities, commands, and units that are responsible for the acquisition, collection, management, storage, development, fielding, sustainment, training, modeling and simulation, production, exploitation, visualization, and dissemination of geospatially referenced information within the generating and operating forces.

2–3. Linkages

The AGE is a component of the Army Enterprise Architecture (AEA) as described in AR 25–1. As such, all AGE processes will conform to and be included within the overall AEA, the CIO/G–6 Army Data Strategy, and the LandWarNet and Mission Command Strategy. Additionally, the AGE synchronizes with the National System for Geospatial–Intelligence (NSG). Therefore, the AGE will be consistent with, and comply with established National, DOD, and Joint policies pertaining to GI&S and standards will synchronize with DOD Information Technology Standards Registry (DISR) requirements. The AGE is a component of the COE and conforms to COE requirements. All Computing Environments are required to comply with the requirements of the COE, and subsequently, the AGE as defined in relevant documentation.

2–4. Certification

AGE certification will be aligned with current Army process timelines and requirements such as ASA (ALT) COE consisting of separate computing environment management process timelines and requirements. Systems fielding to a capability set must comply with the geospatial requirements associated with that capability set, as specified in or derived directly from: approved requirements documents, including Joint Capabilities Integration and Development System (JCIDS) documents, other approved requirements documents, Army and Joint regulations and instructions, or applicable laws. Assignment of a geospatial requirement to a particular capability set will take into account COE strategies, Weapon Systems Review recommendations, and an overall cost–benefit analysis. System program offices shall work with Army test commands to develop and test systems to meet Army Interoperability Certification (AIC) and AGE Certification, coordinates AIC request to CTSF/G–6, provides program subject matter expert (SME) support throughout all phases of testing.

2–5. Army Geospatial Enterprise implementation guidance

The AGE requires implementation of, and adherence to, a uniform set of standards, architectures, business process requirements and protocols that ensure interoperability between and among Army systems and CEs and promote achieving a standard and sharable geospatial foundation. The AGE defines the Global Network Enterprise Construct (GNEC) for the geospatial functional area within the Army, and encourages geospatial interoperability and collaboration with mission partners. Current AGE policy, implementation documentation is developed and maintained by the AGC and is available through AGC or ASA (ALT).

Section II
Responsibilities of Army Service Component Command and units below HQDA in support of the Army Geospatial Enterprise

2–6. Commanding General, U.S. Army Training and Doctrine Command

CG, TRADOC will —

a. Employ the ARCIC to the following:

(1) Conduct Level Three Integration, staff and validate required GI&S Gaps and Capabilities Development requirements.

(2) Conduct TRADOC staffing of GI&S Joint Capabilities Integration and Development System (JCIDS) documents and act as the gateway for JCIDS documents into DCS G3/5/7, DAMO–CI.

(3) Serve as a member of the Army GGB.

b. Charter the TCM–Geospatial to—

(1) Perform as the centralized manager for the coordination, integration, interoperability, and synchronization of all Army GI&S materiel requirements in support of current and future forces.

(2) Collect validate, and synchronize Army GI&S functional requirements and forward to TRADOC, Chief of Engineers and DCS G–2 for submission to the NGA in accordance with CJCSI 3901.01.

(3) Ensure geospatial solutions are compatible, compliant, and interoperable to enable and extend the AGE, in

coordination with the Army GIO, the AGC, ARCIC, and other TCMs responsible for Army systems and programs incorporating a geospatial component.

(4) Through the Director ARCIC, TCM Geospatial will provide policy and guidance to TRADOC combat developers for JCIDS documentation to articulate geospatial solutions for Army systems and programs that incorporate a geospatial component.

(5) Publish and maintain an AGE concept of operations (CONOPS) that concentrates on implementing the AGE within the operational force and systems.

(6) Publish an AGE CONOPS for Generating Force Enterprise Activities. This CONOPS will describe the considerations for implementation of the AGE as required by non-operational units.

(7) Serve as the Chief of Staff for the GGB support staff.

(8) Serve as the Chair for the GGB Council of Colonels and GSTF.

2–7. Commanders of Army service component commands

ASCC commanders will—

a. Provide federated GI&S data as a component of the AGE using assigned or attached resources.

b. Maintain direct and general support of standard GI&S product distribution capabilities to support U.S. ground forces, allied forces as provided for in bilateral or multilateral agreements, and other forces as directed.

c. Develop and maintain standard GI&S hard and soft-copy product stock plans for peacetime training and operations, wartime initial issue for wartime and stability operations, including sustainment within areas of interest (AOIs). Submit storage and issue requirements annually to CCMD for validation, and coordinate with the servicing supply depot, deploying forces, and other identified friendly forces to receive direct support product distribution from the command. Submit GI&S training product quantities to DLA annually to assist in production planning. Units must have an active map account for forecasting quantities.

d. Acquire or develop new geospatial information source materials within the theater area, integrate these data into in–theater geospatial elements (Geospatial Planning Cells or Engineer Brigades), and send new data and updates to AGC, NGA, or to the appropriate DOD library.

e. Designate a staff GI&S Officer responsible for developing, coordinating and implementing theater AGE plans, programs and policies in conjunction with the USACE/AGC.

f. Coordinate and document operational requirements, via the GI&S Officer, materiel requirements, doctrinal changes, and document campaign/operational lessons learned recommendations, and training procedure requirements (in conjunction with the GPC) for submission to higher headquarters. Submit name, phone and email to the DCS, G–2 and the Army GIO annually. Coordinate and consolidate GI&S support requirements that exceed organic capabilities with the appropriate GPC for action or submission to the USACE/AGC. Additionally, excess GI&S capabilities that exceed their organic needs should be reported to their respective GPC for potential federated support to the AGE.

g. Coordinate geospatial information and imagery products with either the appropriate GPC or USACE's Geospatial Information Library.

h. Conduct, in accordance with CJCSI 3901.01, requirements reviews on a cycle no longer than every 2 years or whenever a plan, mission, or requirement changes to ensure that—

(1) Area requirements for GI&S needed to support planned operations and training are properly documented for within the appropriate OPLAN (ANNEX B, APPENDIX 5) and/or CONPLAN (ANNEX B, APPENDIX 5) and are forwarded to the supported CCMD and/or DCS, G–2 for NGA and/or AGC production.

(2) CCMD mandated DLA contingency stocks of standard products and information will be adequate for Army forces executing OPLANs and contingency plans (CONPLANs).

(3) Develop an annual federated GI&S data production plan in conjunction with the GPC; DCS, G–2; USACE and/or AGC and NGA.

2–8. Army Geospatial Information Officer

The Army GIO will-—

a. Serve as the Army's central manager responsible for the coordination, assessment, and synchronization of all Army policies, and standardization requirements for the AGE. The Army GIO oversees the operational, administrative, and daily management of the AGE, as well as the HQDA geospatial governance process.

b. Manage, maintain, and provide technical and programmatic coordination of the Army's geospatial portfolio for the Operating and Generating Forces.

c. Develop strategic direction, guidance, and policy for all GI&S and IGI&S issues across all Army warfighting functions, operational domains, and generating force activities.

d. Assess the impact of emerging GI&S and IGI&S requirements and technologies on current and future Army operations, systems and computing environments and make recommendations to appropriate proponents.

e. Synchronize HQDA geospatial issues between the Army GGB and the ARSTAF.

f. Coordinate with Army Modeling and Simulation Office to synchronize AGE issues across the communities

enabled by M&S, to ensure data sharing and/or reuse between the communities and provide the Army with a "train as you fight" geospatial environment.

g. Establish and maintain alignment between the geospatial enterprise construct and broader HQDA and DoD enterprise architectures.

h. Synchronize the incorporation of AGE capabilities and processes into Army and Joint Doctrine, Organization, Training, Materiel, Leadership, Personnel, and Facilities (DOTMLPF).

i. Provide system engineering interface at the enterprise level to ensure AGE alignment of requirements and programs with LandWarNet.

j. Ensure synchronization of Army geospatial enterprise capabilities and activities with those of the NSG, and ensure Army compliance with applicable standards and doctrine.

k. Coordinate with DCS, G–2 on proposed standards recommended for inclusion in, or retirement from, the DOD Information Technology Standards and Profile Registry (DISR) for coordination through the NSG Geospatial–Intelligence Standards Working Group (GWG).

l. Assist in the validation and prioritization of Army GEOINT requirements in coordination with DCS, G–2, DCS, G–3/5/7, and ASCCs.

m. Coordinate with NGA's College and with the TRADOC to ensure necessary training is provided to execute operations within the AGE construct.

n. Coordinate with CIO/G–6; DCS, G–3/5/7; ASA (ALT); and ATEC to ensure systems that produce or exchange geospatially referenced data are tested and certified for AGE compliance. This AGE Certification will be submitted to the CIO/G–6 for incorporation into the system's AIC.

2–9. Army geospatial planning cells

The GPCs will—

a. Coordinate with the ASCC GI&S officer for geospatial information and data support to the command's area of responsibility (AOR).

b. Collect, generate, manage, analyze and disseminate geospatial data, information and products to and from geospatial engineering units operating within the GPC's AOR.

c. Manage and maintain the Geospatial Database for the AOR, as the feature data component of a Standard and Sharable Geospatial Foundation (SSGF).

d. Manage and provide a SSGF in support of the Common Operational Picture (COP) for all ASCC Mission Command networks and systems within their AOR.

e. Ensure all geospatial data production standards are met and followed when creating and updating geospatial data for the geospatial database.

f. Produce special GI&S products to include analyzing terrain data, preparing decision graphics, image maps, 3 Dimensional (3D) terrain perspective views, map substitutes, map updates and tactical decision aids and Web services, and participate in the Intelligence Preparation of the Battlefield or Battlespace (IPB) process and provide direct support to operations.

g. Assist the ASCC GI&S Officer to ensure GI&S considerations are included in plans and orders.

h. Coordinate with NGA, Defense Intelligence Agency (DIA), host or allied nation geospatial support activities, the Army GIO, AGC, and Theater Engineer and MI brigades in order to create and maintain a geospatial enterprise from National to Tactical levels.

i. Provide oversight and reach back support for all echelons of geospatial engineer teams operating within their AOR to ensure that geospatial data is shared horizontally and vertically among units to ensure a common standard sharable geospatial foundation for all Mission Command systems.

j. Receive geospatial data from subordinate units for inclusion into the geospatial database.

k. Ensure the geospatial database serves data via the web to all units requiring it.

2–10. Geospatial Intelligence cells

GEOINT cells within operational commands will—

a. Manage the geospatial database and provide a SSGF to include data, products, services, and globe to facilitate a unified COP for mission command and Army Warfighters.

b. Support all Mission Command functional areas by creating GEOINT data and products.

c. Analyze and produce mission-focused products that enable situational understanding.

d. Produce GEOINT as a service by layering all geospatial and intelligence data and information to enhance a commander's ability to make battlefield decisions.

e. Optimize the geospatial and intelligence production effort.

f. Identify gaps in existing GEOINT databases and develop nominations for the Intelligence, Surveillance, and Reconnaissance synchronization plan.

g. Collect, generate, and process geospatial and imagery data to update and enhance the geospatial database.

h. Disseminate GEOINT data, products, and reports as a Web service, or as digital media.

2–11. Theater Geospatial Engineer

The Theater Geospatial Engineer will—

a. Be a duty performed by the Joint Operational Area (JOA) or Area of Operation (AOR) Engineer, which may be the Engineer Brigade Commander (if dual-hatted).

b. Be responsible for oversight, assessing, and prioritizing of the geospatial data collection effort and managing the SSGF updates collected from strategic and operational assets in addition to GEOINT Cells at lower echelons.

c. Be responsible for the prioritizing and coordination of the geospatial data collection effort includes requests for support from NGA, AGC, the regionally responsible GPC, the Engineer Brigade, and the theater-level wide area mapping assets.

d. Be responsible for the SSGF management including the maintenance and dissemination of the most current and relevant maps, imagery, feature and elevation data required for geospatial visualization and analysis within the JOA/AOR.

e. Ensure that updated and enriched geospatial data is passed to the regionally responsible GPC to inform the responsible ASCC and COCOM.

f. Be responsible for any requests for forces (RFFs) required augmenting the Theater Engineer Brigade with personnel and equipment from a GPC or Engineer Geospatial Company in performing missions as the tasked geospatial supporting unit.

2–12. Commander, Engineer Brigade

The Engineer Brigade Commander will—

a. Serve as the JOA Geospatial Officer responsible for oversight of geospatial engineering operations if not covered by senior Theater Engineer.

b. Synchronize geospatial engineer operations within the JOA and interface with the ASCC GPC.

c. Synchronize the Standard and Sharable Geospatial Foundation (SSGF) within the JOA.

2–13. Geospatial Engineer Team, Engineer Brigade

The Geospatial Engineer Team will—

a. Serve as the geospatial collection epicenter for managing, storing, validating and providing quality control (QC) of geospatial data collected by units in the AOR.

b. Collect geospatial data updates generated from units operating in-country, consolidate and validate the data for adherence to AGE standards and forward it to the ASCC GPC for inclusion into the ASCC SSGF.

c. Receive the theater SSGF from the ASCC GPC prior to deployment and provision and/or manage the SSGF within the JOA.

d. Serve as the in-country interface to the ASCC Geospatial Planning Cell.

e. Coordinate with units operating in the JOA to enforce adherence to AGE standards (data structure, metadata, quality control, extraction and/or generation guidelines) and ensure they operate using the SSGF.

f. Coordinate in-theater with other functional brigades that do not have geospatial engineer teams for data requirements and ensure units operate off of the SSGF.

g. Be responsible for the analysis and production of geospatial products for supported units.

h. Perform database management for the storage of all imagery, maps, feature, and elevation data and collateral source materials.

2–14. Geospatial Engineer Company

The Geospatial Engineer Company will—

a. Provide task-oriented geospatial engineering support to theater army headquarters, GPCs, and deployed units that require support or augmentation.

b. Provide modules tailored to support the geographic combatant commander and JTF Headquarters; theater army, corps, and division headquarters; GPCs; modular support and functional brigades without organic Geospatial Engineer Teams; other Joint or multinational division and brigade-size elements; and the Federal Emergency Management Agency regions with analysis, collection, generation, management, finishing, and printing capabilities.

c. Ensure effective employment that depends on coordination among parent engineer brigade commander and staff, the ASCC GI&S officer, the ASCC engineer or G2, and the Theater Engineer and Military Intelligence Brigade Commanders and staffs.

2–15. Geospatial Enterprise Governance Board

The GGB will—

a. Ensure geospatial integration within Army policies, regulations and Joint DOTMLPF.

b. Adjudicate AGE issues presented by the Army GIO.

c. Coordinate, integrate, and analyze all GEOINT issues across the Active Army, Army Reserve/National Guard, Joint, Interagency and Coalition agencies.

d. Coordinate geospatial standards development, promulgate and recommend enforcement through proper ARSTAF staffing within the Army, and synchronize geospatial standards with the NSG.

e. Coordinate network engineering, system architecture, and system engineering for the AGE within the Army, and synchronizing networks and systems with the NSG.

f. Develop strategic communications for the AGE, including the planning and execution of a strategic engagement plan.

g. Provide financial, manpower, resource, and investment opportunity analysis and oversight of geospatial programs across the Army, and coordinating geospatial resource investment with DOD and NSG.

h. In accordance with AR 15–1, charter a GGB Council of Colonels (CoC) and Geospatial Standing Task Force, comprised of key stakeholders, to work actions on behalf of the GGB to enable interoperability across COE Computing Environments, echelons, NGA, other Services, and JIIM partners.

Chapter 3
Geospatial Information and Services

Section I
General

3–1. Purpose
This section provides an overview of GI&S and the procedures in place to request new and additional products.

3–2. Requesting support
Any unit or activity needing GI&S support will contact their organic U.S. Army Geospatial Engineer and/or GEOINT team. As discussed in chapter 1 of this AR, as well as in ATP 3–34.80, these teams can be found from the brigade level up to the corps level. If support is unavailable, contact the Army Geospatial Center Warfighter Support Division for assistance. Only after Army internal resources have been exhausted should Army units or activities contact NGA.

3–3. Requesting National Geospatial-Intelligence Agency products
a. Map distribution is a logistics function. Units and organizations with a Department of Defense Ad-dress Activity Code (DODAAC) and a valid map account may order standard NGA products through the Defense Logistics Agency supply system. The GI&S products have been categorized under the Supply Category of Material Code (SCMC) as Class II items of supply. The GI&S products are integrated into the Standard Army Retail Supply System and DOD eMALL. All units are encouraged to establish their own map account with DLA. DLA-managed mapping products are "Free Issue" to U.S. military and most federal government agencies.

b. Direct support procedures. Army customers will order GI&S products, using the National Stock Numbers (NSNs) or NGA Reference Numbers (NRN) assigned by the NGA. The requisitioning process will be accomplished using the Standard Army Retails Supply Systems (SARSS) and Standard Army Management Information System (STAMIS). Military Standard Requisition and Issue Procedure (MILSTRIP) transactions may also be placed by using DOD eMALL and is the DLA-preferred method. The DLA Map Catalogs allow customers to search for and build MILSTRIP orders for submittal directly into DOD eMALL. Map stockage and issue procedures will follow the provisions of AR 710–2 for entry of geospatial information requisitions into the MILSTRIP format. All unclassified GI&S transactions will be processed through existing or planned automated data processing systems. Unclassified GI&S products will be included in stockage plans at General Support (GS) class II, IV, and VII supply points at Corps and TAACOM. Requisitioning, stockage, and distribution of classified GI&S products will be accomplished using procedures stated in local SOPs. The DLA is the source of supply for providing GI&S products, as the wholesaler, in bulk.

c. Ordering National Geospatial-Intelligence Agency standard products. Submit requests for existing standard NGA products per appendix C. MC&G aviation products and services, and Flight Information Publications (FLIP) requirements are set forth in AR 95–2.

d. Descriptions of standard products. The "NGA Products and Services Handbook" is available online at https://intellipedia.intelink.gov/wiki/NGA_Products_and_Services_Handbook. The handbook provides a brief description of each standard product or service and outlines the major intended uses for each product. The online DLA catalogs give a more detailed description of the characteristics of each listed type of product.

e. Map ordering. Map distribution is conducted by Defense Logistics Agency for Aviation Mapping Customer

Operations (DLA AVN/QAM) located in Richmond, Virginia. Their Web site (http://www.aviation.dla.mil/rmf/) contains information on setting up a map account, ordering maps, as well as a link to the online e-catalog. DLA also has a catalog on SIPRNET which contains classified products.

f. Requesting substitutes for National Geospatial-Intelligence Agency maps over the United States. For civil mapping, go to the USGS Web site at http://store.usgs.gov/b2c_usgs/b2c/start/(xcm=r3standardpitrex_prd)/ to do research and download the maps for local printing. Installation maps (MIM) in completed or draft format may be downloaded from the Sustainable Range Program (SRP). If standard NGA maps do not exist over U.S. areas, or the product does not exist or the existing product is inadequate, a substitute may be requested. Submit requests for USGS products through your Staff point of contact for GI&S to the NGA Army Customer Support Team (see app B).

g. Requesting specifications for standard products. Registered users of DOD's Acquisition Streamlining and Standardization Information System (ASSIST) can, by the internet, search for, view, and download official, full text PDF versions of Military and Federal Specifications and Standards and other items. ASSIST can be accessed on the Defense Automated Printing Service (DAPS) Web site available at http://assist.daps.mil. Complete ASSIST registration and procedures are given on the DAPS Web site. Users must register for ASSIST but there is no charge for the registration and no charge for access to the documents.

h. Request for production of new National Geospatial-Intelligence Agency standard data. Requesting new area coverage for standard products and databases.

(1) *Overall description.* The CJCSI 3901.01 establishes the process to define standing production requirements for geographic area coverage for standard hardcopy products, digital products, databases, and for identifying GI&S requirements associated with command exercises. Operational GI&S requirements may be entered into the requirements cycle by identifying and submitting them through the command's staff point of contact to the supported CCMD (see app B). Training and exercise requirements are submitted through the staff point of contact to FORSCOM and DCS, G–2

(2) *Out–of–cycle requests.*

(a) Crisis support. GI that has not been validated in a requirements cycle but needed on a one–time or first–time basis in support of a crisis may be provided by Army geospatial personnel, the AGC or by NGA. The CCMDs can only activate NGA crisis support, in coordination with the Joint Chiefs of Staff (JCS). Upon declaration of a crisis by the JCS, commands with organic geospatial units will identify all local products that support crisis actions and provide general coordination with the appropriate commands..

(b) Unprogrammed, noncrisis support. Requirements for noncrisis GI&S support are sent to the appropriate staff point of contact for forwarding to the GI&S officer of the appropriate command, as required (see app B).

i. Requesting new or modified standard products and databases. i. The Army has authority to concur or nonconcur with changes to specifications of standard GI&S products. Submit requirements to create new standard products or to modify existing ones through command channels to the U.S. Army Geospatial Center for a technical evaluation. If found to be a valid technical requirement, AGC will produce a Statement of Requirements and route it through the DCS, G–2 to NGA. The following information is required:

(1) *Overall description.* Describe the system or activity and definition of the type of product or support expected. Explain how the expected support is used for specific operational concepts, weapon system support, planning or other specified uses. Acquisition programs should document their geospatial information requirements as part of their life cycle mission data plans, as per DODD 5250.01.

(2) *The impact.* Describe the impact on development, test and evaluation, or operational commitment if the product or service is not provided as requested. Express the impact in terms of the OPLAN, CONPLAN, training requirement, or other mission essential requirement that will be supported by the re-quest.

(3) *Accuracy requirement.* Describe the content and accuracy requirements, correlated with the tech-nical characteristics and accuracy of the system or activity that the product or service will support.

(4) *Intended use.* Determine the interrelationship, if any, or the intended use of the required item with the use or design of existing products.

3–4. Special products

When standard GI&S products cannot meet the needs of the user, special products must be produced. Army geospatial units and the AGC provide this support with expedient, substitute, or tailored products and services.

a. Requesting source materials. Submit requests for geospatial source materials in accordance with AR 25–50, with a justification and any statement of urgency, to the staff point of contact, or NGA customer liaison officer (see app B).

b. Obtaining information about existing special products. Because of the limited distribution and uniqueness of most special GI&S support, these products are not centrally controlled, are seldom cataloged, and may be difficult to obtain. Contact the operations staff of the supporting geospatial unit or the staff point of contact to identify existing special products that might address a current requirement (see app B).

c. Requesting new tailored products and services. After establishing the technical feasibility of tailored support for a particular function, request the required support through the appropriate geospatial staff point of contact (see app B). Send requests on behalf of state or local governments, the private sector, foreign governments, or foreign military

activities through the servicing public affairs officer or security assistance office, as appropriate, to the staff point of contact (see app B).

d. Existing. These special products, such as the AGC Urban Tactical Planner (UTP), can be obtained from the AGC via their Web sites and their Common Map Background (CMB) capability.

3–5. Requesting commercial imagery

Commercial imagery is digital data obtained from sensors carried in satellites or airborne platforms. It includes collecting data both in the visible and nonvisible portions of the electromagnetic spectrum. Commercial imagery and derived products are major information sources for all WfF. The imagery and products are significantly important to activities such as humanitarian assistance, disaster relief, opera-tional planning, intelligence analysis, modeling and simulation, environmental analysis, training, and military planning missions. DODD 5105.60 grants authority to NGA to serve as the Executive Agent for commercial imagery for DOD Components, DCI, National Security Council, and, upon request, other Federal Government Departments and Agencies. NGA imagery repositories are available within the National System for Geospatial Intelligence (NSG) architecture and utilized by the AGC Imagery Office in order to satisfy Army commercial satellite imagery requirements. The NGA imagery repositories and/or discovery tools are hosted on NIPRNET, SIPRNET, and JWICS.

a. Mission command data dissemination. Geospatial Engineers are responsible, via Distributed Common Ground System-Army, to provide standard and shareable geospatial foundation, including commer-cial imagery, to mission command systems and users.

b. Data discovery tools. The following discovery tools are available to all users and provide tools for geospatial browsers, text searches, query forms, and other Web-based tools identify imagery coverage over specified areas of interest:

(1) *Net-Centric Geospatial intelligence Discovery Services.* NGDS provides National System for Geospatial-Intelligence (NSG) members with access to GEOINT products and services, including near-real time access to operational systems, as well as data from historical archives. NGDS is currently hosted within the GEOINT Information Management Services (GIMS) infrastructure; currently no NIPRNET access; NGDS SIPRNET access is available at https://ngds.nga.smil.mil/wes;https://ngds.nga.smil.mil/wes; NGDS JWICS access available at https://ngds.nga.ic.gov/wes.

(2) *Information access services.* IAS provides federated access to all available imagery across multiple servers and areas of interest, which allows the user to view all imagery available for streaming. SIPRNET IAS http://204.37.126.2/IAS/index.jsp.

(3) *Global Enhanced Geospatial-Intelligence Delivery.* EnhancedView Web Hosting Services with commercial imagery dissemination, account registration required. https://rdog.digitalglobe.com/memberAdministration/RegistrationRequest.html.

(4) *NGA Gateway (PKI & SIPRNET Web sites).* Regional Orthomosaics, CitySphere, CI Orthomosaics (NIPRNET)

(a) (Available at https://www.geointel.nga.mil/).

(b) (Available at https://aero.geointel.nga.mil/products/regionortho/index.cfm).

(c) (Available at https://aero.geointel.nga.mil/products/citysphere/index.cfm).

(d) (Available at https://aero.geointel.nga.mil/products/ciortho/index.cfm).

(5) *Regional Orthomosaics, CitySphere.* CI Orthomosaics (SIPRNET).

(a) (Available at http://org.nga.smil.mil/CRS).

(b) (Available at http://wwwin.geoint.nga.smil.mil/products/productdesc).

(6) *NGA Custom Media Team.* NGA's Custom Media Generation Team fulfills tailored media requests for geospatial intelligence data. Providing electronic transfer from NGA's Gateway database and its own master Hard Drive database, output capabilities include FTP, CD-ROM, DVD, DL-DVD, and other electronic devices and external hard drive dissemination. This information is available at https://www.geointel.nga.mil/information/products/ordering/custom_media/index.html).

(7) *Visualization – Palenterra.* Web-based client allows users to view, query, and edit data from within a Web-browser. Depicts base maps, imagery and other GEOINT; NIPRNET access is available at https://palanterra.nga.mil/; SIPRNET access is available at http://palenterra.nga.smil.mil/palx3.

c. Submitting new commercial imagery requirements – Users with JWICS access can submit new requirements through the Geospatial-Intelligence Management Services (GIMS) Web-based application. URL is available at https://portal.nga.ic.gov.

d. Users that do not have access to JWICS, or the local geospatial unit, can contact the AGC Imagery Office (AIO). AIO provides expertise on the NSG TCPED cycle, most specifically through fulfillment of collection management services for users requiring new commercial imagery collections or unfunded and/or unlicensed archived imagery requirements. AIO leverages and utilizes the EnhancedView contract, COMSAR contract and other NGA IDIQ commercial contracts as well. Additional AIO services include an online repository of selected commercial imagery pertaining to terrain and urban analysis and water resources operations, assistance to users with existing commercial imagery research, acquisition and dissemination needs if they do not have access to NGA resources.

e. The AIO collaborates directly with the Army Departmental Requirements Office (ADRO), NGA Source Directorate & NGA St. Louis, the USGS and various commercial satellite and/or aerial digital imagery vendors to provide requested imagery availability information, data acquisition, data processing, and administrative coordination.

f. Any user with requests for information and/or commercial imagery requirements support, should contact the AGC AIO via an email request to dll-agc-aio@usace.army.mil, via phone request to commercial 703-428-6909; DSN 364-6909; or standard memorandum in accordance with AR 25–50 available at: https://cac.agc.army.mil/Products/AG-CImagery/.

g. Requests should at minimum include the following information:

(1) Geographic area of interest in latitude and longitude coordinates in degrees, minutes, seconds, or decimal degrees or ESRI shape file format.

(2) Acceptable date range for data coverage; cloud cover and quality restrictions.

(3) Satellite system and sensor and/or desired spatial resolution.

(4) Desired end product (digital, preferred media).

(5) Mailing or electronic address and phone number.

Section II
Controlling Geospatial Resources

3–6. Authorized customers and reimbursement for support

a. a. Army geospatial engineer units provide products and services to Army units and activities. These units are authorized to request reimbursement for support such as extended travel, expensive equipment rentals, recurring maintenance or software licensing costs for geospatial equipment, or high consumption of geospatial supplies to recover unprogrammed or unfinanced costs.

b. Army geospatial units may support other Services and other Federal Government activities with ACOM approval, and are authorized to request reimbursement for such support to cover unprogrammed costs. A MOU should be considered for long–term support relationships that add missions of support to other Services.

c. Army geospatial units may provide unclassified GI&S support to state or local governments or the private sector during Defense Support of Civil Authorities (DSCA) (Title 10 (10 USC)) and Domestic Operations 32 USC without formal approval and guidance from the servicing public affairs officer or security assistance office, as appropriate, and concurrence of the command's staff point of contact (see app B). Support to foreign governments or foreign military activities must be approved by NGA.

3–7. Foreign agreements

The NGA is the only DOD agency authorized to negotiate or enter into GI&S agreements with foreign governments during peacetime. Pass requests for such agreements through command channels to DCS, G–2 (DAMI–OP) for review, validation and forwarding to NGA. In time of war or DSCA, the CCMD is authorized to enter into agreements to maintain support to the force.

3–8. Safeguarding geospatial information and services materials

a. a. Recipients of GI&S materials of foreign areas that bear caveats limiting distribution will take reasonable precautions to preclude the unauthorized transfer of those materials to non–DOD activities or persons.

b. When an Army activity holds 400 or more cells of NGA–produced digital data covering foreign areas, it will secure the data in a General Services Administration (GSA) approved container or a vault room that provides physical evidence of unauthorized tampering or forced entry.

c. Army geospatial units and other activities working with or modifying NGA produced materials should use NGA guidelines for derivative classifications and restrictive handling or distribution caveats. Units will develop procedures to safeguard GI&S.

d. GI&S materials bearing enhanced security caveats (for example, SCI or SAP) will be controlled as di-rected by the cognizant security official.

3–9. Reports

The ACOMs and ASCCs with geospatial assets will submit quarterly summaries of significant geospatial events and support activities to Office of the Chief of Engineers with information copies to the DCS, G–2 (DAMI–OP). These summaries may be endorsements of feeder reports established within the ASCC.

Section III
Duplicating and Distributing Materials

3–10. Reproduction

Army geospatial units are authorized and equipped to reprint GI&S products. AR 25–30 provides detailed guidance on what may be printed by units. Other activities wanting to reprint GI&S materials will observe the following guidance: *Obtaining permission.* Request approval to reprint from the originator either directly or through the supporting geospatial unit (see app B). Units are approved to reproduce print-on-demand products.

b. Obtaining reproducibles. Request reproducible materials through the ASCC GPC to the originator.

c. Adding credit lines and disclaimers. Unless the originator of the materials to be reprinted provides other instructions, identify the originating activity, the reprinting activity, and reprint date prominently on the reprints, along with a statement about information added, deleted, or changed from the originals. Retain any security, distribution, and handling caveats.

3–11. Photographing, photocopying, or video copying geospatial information and services materials

The GI&S materials may be copied for official purposes as long as they retain any security, distribution, and handling caveats. They must also be clearly identified as facsimiles of geospatial materials and subject to dimensional error. This also applies to products produced by Army geospatial units.

3–12. Digitizing hardcopy geospatial materials

No Army activity, except for AGC and geospatial units, will digitize NGA products or contract for digitizing such products without first obtaining approval from the Director, NGA. Clearly identify any digital files created from hardcopy geospatial products as digital facsimiles of analog geospatial products and retain any security, distribution, and handling caveats from the original materials. Mark any derived products to be used operationally as facsimiles of GI&S materials and retain all applicable caveats.

3–13. Duplicating digital data

Digital data received from NGA may be duplicated, retaining security, distribution and handling caveats, for internal use within the command or activity that initially requested the data. For external use, see paragraphs 3–14 and 3–15, as appropriate.

3–14. Distributing materials within Department of Defense

Observe all security and handling caveats on GI&S materials when making distribution and ensure that receiving activities are authorized to receive and equipped to protect the materials.

3–15. Releasing materials outside Department of Defense

a. Hardcopy NGA produced GI&S materials of posts, camps, and stations within the United States and those of foreign areas, compiled at scales smaller than 1:250,000, and hardcopy materials derived from them, unless otherwise marked, may be released outside DOD providing the quantity to a single requestor does not suggest an attempt to bypass the NGA program of sales to the general public. Similarly, digital data derived directly from such products by Army activities may be released outside DOD without restriction.

b. The NGA produced digital data and NGA GI&S products of foreign areas and materials derived from them, may not be released outside DOD without prior approval from NGA; submit all requests for such approval through the appropriate staff points of contact (see app B).

c. Army activities will not sell any NGA produced maps, charts, publications, or data to the public, foreign countries, or international organizations.

d. Army activities may exchange or transfer GI&S products and materials at scales larger than 1:250,000 (or excessive quantities as described in para 3–15a) to foreign countries under provisions of international agreements negotiated or concluded by NGA.

e. Products and services of Army geospatial units may not be prepared for or transferred to the public, foreign countries, or international organizations without the written consent of the servicing public affairs office and, if NGA produced materials are used for sources, written approval from Director, NGA.

f. Products bearing enhanced security caveats (for example, SCI or SAP) are not authorized for public release without written approval of the cognizant security official. See AR 380-28 and AR 380-381 for additional guidance.

Section IV
Disposing of Unneeded Geospatial Information and Services Materials

3–16. Determining whether or not to dispose of materials

a. If products are current, and of suitable condition and quantity to warrant restocking, contact the nearest Army map distribution activity or DLA distribution facility for instructions (see app C).

b. If materials are special products and represent the last remaining stocks, contact the supporting geospatial unit for instructions (see app B). The geospatial community must ensure archival needs and continuing needs for the products have been met before authorizing disposal.

c. If the products bear enhanced security caveats (for example, SCI or SAP) contact the cognizant security official for instructions.

3–17. Standard operational procedures

Units will develop procedures to recover and reuse materials with economic value.

a. Map stock. Every effort should be made to reuse paper scrap. Map paper is difficult to recycle because of its resistance to pulping.

b. Magnetic media. Take magnetic media to the supporting data processing center for degaussing to remove the digital information, regardless of its classification. Degaussed materials may be returned for reuse.

3–18. Disposing of materials

a. If the GI&S material is classified, destroy it so that it cannot be reconstituted in accordance with existing Army security regulations. Specific guidance for destruction of material bearing enhanced security caveats is in AR 380-28 or AR 380-381. Specific guidance for disposal and destruction of classified NGA GI is available in DODD 5200.1.

b. If the material is unclassified but has a Limited Distribution (LIMDIS) caveat or covers a foreign country at a scale of 1:250,000 or larger and will not be recycled, arrange bulk disposition in a landfill where burial is assured. Individual sheets may be torn in quarters and disposed of with other trash.

c. If the material is unclassified bulk, without caveats or scale restrictions (that is, 1:250,000 and smaller scale), dispose of it as scrap through the servicing Property Disposal Office. DOD Manual 4160.21–M requires that ultimate disposal of such products include mutilation by shredding, pulverizing or other means.

d. Compact disks may be destroyed locally via disk shredding machines approved for the classification level of the disks being destroyed. There are two facilities that will recycle or dispose of used NGA–produced CDs (CDs).

(1) *Classified and sensitive including limited distribution and for official use only.* The National Security Agency (NSA) has agreed to accept all NGA–produced classified (up to the Secret level) and sensitive CDs for destruction. The CDs must be shipped according to the following:

The CDs must be separated from their plastic jewel cases and any paper wrappings or inserts.

(b) The CDs must be packaged in boxes no larger than 18” x 18” x 18” and weigh no more than 40 pounds each. The total weight for each shipment must not exceed 1,600 pounds.

(c) All direct deliveries must be coordinated with the Classified Material Conversion Office (S714), DSN: 644–7215 or (301) 688–7215.

(d) Material may be sent through the Defense Courier Service.

(e) Material up to “Secret” can be sent by registered mail. Material up to “Confidential” can be sent by first class or certified mail. The mailing address is:

Director NSA Central Security Service
(S714), Suite 6890
9800 Savage Road
Fort Meade, MD 20755–6000

(2) *Unclassified compact disks.* The NE–SAR Systems, a private plastic recycling firm, has agreed to accept NGA–produced “Unlimited Distribution.” The CDs must be separated from their plastic jewel cases and any paper wrappings or inserts. The NE–SAR will also accept the jewel cases for recycling as long as they are separated from the CDs. Ship the separated “Unlimited Distribution” CDs and plastic jewel cases to the following address:

NE–SAR Systems
420 Ashwood Road Darlington, PA 16115
Tel: (412) 827–8172
FAX: (412) 827–2811

Section V
Providing Feedback

3–19. Requesting updates or corrections to existing products

Each map sheet contains a statement that all corrections and comments should be reported to appropri-ate staff point of contact. For products with errors, return the product with the errors boldly marked.

3–20. Requesting modification of classification level of geospatial information and services materials and products or exceptions to distribution or handling caveats

Refer any request for change to security classification or distribution and handling caveats through com-mand channels to the originator.

3–21. Furnishing new source materials

Military activities producing or acquiring GI&s data are required to furnish original data to an appropriate DOD GI&S library via their respective geospatial support activity listed in appendix B. If material cannot be immediately provided to the libraries, the library will be notified as to the existence of the new data and given a point of contact. Library and corresponding materials to be provided by field geospatial units are as follows:

a. Send maps, geodetic data, foreign place names, nautical charts, and bathymetric data to NGA.

b. Send aeronautical charts, gravity data, air facility and flight data, installation data, and positional data to NGA.

c. Send magnetic data to the National Oceanic and Atmospheric Administration, National Geophysical Center, Solar–Terrestrial Physics Division.

d. Send water resource, hydrologic, geologic, vegetation and soils data and information to USACE AGC. This will become part of the Geospatial Information Library.

e. Send information concerning manmade features that qualify as hazards to flight safety to DCS G–3/5/7 and NGA.

3–22. Evaluating support

Provide feedback on the adequacy and usefulness of GI&S support from Army units to the command level having supervision of those units, with information copies to the units as appropriate. Provide feedback on the adequacy and usefulness of GI&S support from NGA through command channels to DCS, G–2 (DAMI–OP).

3–23. Recommending Changes

Providing GI&S products and services to support critical missions on the battlefield consumes valuable resources, so the geospatial structure must be constantly reviewed to ensure that it is efficient and sufficient.

a. Offer suggestions for new or changes to current geospatial equipment, operating procedures, products, or services through the Army Incentive Awards Program or directly to the supporting Army geospatial unit (see app B). These units will review and act on those recommendations within their purview and will forward other recommendations through technical channels for resolution.

b. Submit suggestions for new or changes to current geospatial organizations to the Commandant, U.S. Army Engineer School, 320 MANSCEN Loop, Suite 141, Fort Leonard Wood, MO 65473–9999.

c. Submit suggestions for changes to this regulation to DCS, G-2 (DAMI–OP); submit suggestions for changes to a supplement to this regulation to the headquarters publishing the supplement.

d. Submit suggestions for changes to geospatial doctrine to the Commandant, U.S. Army Engineer School.

Appendix A
References

Section I
Required Publications

AR 25–30
The Army Publishing and Printing Program. (Cited in para F–4.)

Section II
Related Publications
A related publication is a source of additional information. The user does not have to read it to understand this regulation. DOD publications are available at http://www.dtic.mil/whs/directives/.

AR 11–2
Managers' Internal Control Program

AR 15–1
Committee Management

AR 25–1
Army Knowledge Management and Information Technology

AR 70–1
Army Acquisition Policy

AR 95–2
Airspace, Airfields/Heliports, Flight Activities, Air Traffic Control, and Navigational Aids

AR 115–13
Installation Geospatial Information and Services

AR 380–5
Department of the Army Information Security Program

AR 380–28
Department of the Army Special Security System

AR 380–381
Special Access Programs (SAPS) and sensitive activities

AR 710–2
Supply Policy Below the National Level

ATP 3–34.80
Geospatial Engineering

CJCSI 3901.01
Requirements for Global Geospatial Information and Services (Available at http://www.dtic.mil/cjcs_directives/cjcs/instructions.htm.)

DLA Catalog of Maps, Charts, and Related Products, Unclassified/Limited Distribution
(Available by submitting a MILSTRIP requisition using NSN: 7644015433809, NGA Reference Number: CATCDNMCI and is also available for download on the DoD EMALL homepage at https://dod-emall.dla.mil. The DLA Map Catalog allows customers to order Aeronautical, Digital, Hydrographical, and Topographical products needed for mission planning and navigation).

DLA Catalog of Maps, Charts, and Related Products, Secret
(Available through SIPRNET by navigating to the DLA homepage (http://www.dla.smil.mil) and click on the "DLA Map Catalog" link on the left hand side of the page. Download the application to your desktop and follow the instructions to unzip the application to your computer. This SECRET catalog contains all DLA-managed mapping products up to Secret classification and can be ordered from DLA by using NSN: 7644014784791 or NGA Reference Number: CATCDCLASSIFIED).

DODD 5105.21
Defense Intelligence Agency

DODD 5105.60
National Geospatial-Intelligence Agency (NGA)

DODD 5200.1
Management of Intelligence Mission Data (IMD) in DoD Acquisition.

DODD 8320.02
Sharing Data, Information, and Information Technology (IT) Services in the Department of Defense

DODI 3115.15
Geospatial Intelligence (GEOINT)

DODI 5000.56
Programming Unique Mapping, Charting, and Geodesy (MC&G) Requirements for Developing Systems

DOD Manual 4160.21–M
Defense Reutilization & Marketing Manual

FM 5–33
Terrain Analysis

FM 5–105
Topographic Operations

FM 21–26
Map Reading and Land Navigation

FM 21–31
Topographic Symbols

FM 34–130
Intelligence Preparation of the Battlefield.

Joint Strategic Capabilities Plan
Joint Strategic Capabilities Plan, Annex G, Mapping, Charting, and Geodesy. Controlled document; copy distribution determined from GI&S Officer in each Command

JP 1–02
DOD Dictionary of Military and Associated Terms

JP 2–01.3
Joint Tactics, Techniques, and Procedures (JTTP) for Joint Intelligence Preparation of the Battlespace (JIPB). (Available at http://www.dtic.mil/jcs/.)

JP 2–03
JTTP for Geospatial Information and Services Support to Joint Operations (Available at http://www.dtic.mil/jcs/.)

JP 3–34
Engineer Doctrine for Joint Operations (Available at http://www.dtic.mil/jcs/.)

NIMAL 805–1A
NIMA Global Geospatial Information & Services (GGI&S) List of Products and Services Available on–line at osis.nima.mil:80/geospatial/list_of_products/nimalop.txt or at www.nima.smil.mil/information/products/index.html or contact: Director, National Imagery and Mapping Agency, Attn: PCO–DFA, 12310 Sunrise Valley Drive, Mail Stop P–39, Reston, VA 20191–3449.

NSG Strategy 2013–2018
United States Imagery and Geospatial Information System Glossary

Section III
Prescribed Forms
This section contains no entries.

Section IV
Referenced Forms
Unless otherwise indicated, DA Forms are available on the APD Web site http://www.apd.army.mil .

DA Form 11–2
Internal Control Evaluation Certification

DA Form 2028
Recommended Changes to Publications and Blank Forms

Appendix B
Army Retention Schedules
View the electronic version of the Army Records Retention Schedules on both the U.S. Army Records Management and Declassification Agency Web site available at http://www.rmd.belvoir.army.mil/markstit.htm and on the Army Electronic Library CD–ROM (EM 0001) for file numbers (FNs), authority, descriptions, and dispositions. See table B–1.

Table B–1
Schedules

File numbers	Description
FN 115–11a	Military Mapping and Geodetic Program
FN 115–11b	Mapping agreements
FN 115–11c	Mapping and geodetic studies
FN 115–11d	Mapping and program priorities
FN 115–11e	Mapping indices
FN 115–11f	Investigative projects
FN 115–11g	Questionnaire surveys
FN 115–11h	Mapping and geodetic reports
FN 115–11i	Mapping and geodetic collection guidance and support files
FN 115–11j	Mapping and geodetic conferences
FN 115–11r	Topographic symbols
FN 115–11t	Map corrections
FN 115–11v	Production and reproduction controls
FN 115–11y	Field recovery notes
FN 115–11ii	Map distribution policies
FN 115–11jj	Map stock levels
FN 115–11mm	Map requisitions

Table B–1
Schedules—Continued

FN 115–11pp	Mapping, charting, and geodetic publication record set

Appendix C
Peacetime Geospatial Support and Staff Relationships

C–1. Product availability

If a standard NGA product does not exist or the existing product is inadequate, a substitute may be re-quested. Submit requests for USGS products through your staff point of contact for GI&S

C–2. Peacetime Geospatial Information and Support relationship

Obtain technical advice or assistance on GI&S from the appropriate supporting Army geospatial unit or staff point of contact below (see table C–1).

Table C–1
Staff points of contact for geospatial support

Command	Staff point of contact for GI&S support	Supporting Geospatial Activity
AMC	DCS, G–2 (DAMI–OP) 1000 Army Pentagon Washington DC 20310-1040 (703) 695–2803/2765	U.S. Army Geospatial Center (CEAGC–WS), 7701 Telegraph Road Alexandria, VA 22315–3864 (703) 428–6895/DSN 328
Army National Guard	Commander, U.S. Army Forces Command 4700 Knox Street Fort Bragg, NC 28310 (910) 570–6203/ DSN 670	132nd Engineer Detachment 21714 Barnes Ave, Bay B Fort Gordon, GA 30906 (706) 791–1337/1496
Army Reserve	Commander U.S. Army Forces Command 4700 Knox Street Fort Bragg, NC 28310 (910) 570-6203/ DSN 670	132nd Engineer Detachment 21714 Barnes Ave, Bay B Fort Gordon, GA 30906 (706) 791–1337/1496
Army Staff Field Operating Agencies	DCS, G–2 (DAMI–OP) 1000 Army Pentagon Washington DC 20310–1040 (703) 695–2803/2765	U.S. Army Geospatial Center (CEAGC–WS), 7701 Telegraph Road Alexandria, VA 22315–3864 (703) 428–6895/DSN 328
Corps of Engineers	HQ,USACE (CERD–ZA) 441 G Street, NW, Washington, DC 20314–1000 (202) 761–0001/ DSN 763	U.S. Army Geospatial Center (AGC) (CEAGC–WS), 7701 Telegraph Road Alexandria, VA 22315–3864 (703) 428–6895/DSN 328
Criminal Investigation Command	DCS, G-2 (DAMI–OP) 1000 Army Pentagon Washington DC 20310–1040 (703) 695–2803/2765	U.S. Army Geospatial Center (AGC) Attn: CEAGC–WS, 7701 Telegraph Road Alexandria, VA 22315–3864 (703) 428–6895/DSN 328
Fifth Army (U.S. Army, North)	Commander HQ U.S. Army North (Fifth Army) (ARNO-CG), 2108 Wilson Way Fort Sam Houston, TX 78234 (210) 221-0383/1267	(ARNORTH G3 Engineer) 2108 Wilson Way Fort Sam Houston, TX 78234 (210) 221-0383/1267
Eighth Army	Commander Eighth U.S. Army (EAEN–MET) Unit #15236 APO AP 96205–0009 DSN 723–6312	5th Geospatial Planning Cell (GPC) HQ, USARPAC G-2 (APIN–OPM–GGIS) Fort Shafter, HI 96858–5200 (808) 438–6305/DSN 438
Forces Command	Commander U.S. Army Forces Command 4700 Knox Street Fort Bragg, NC 28310 (910) 570–6203/ DSN 670	132nd Engineer Detachment 21714 Barnes Ave, Bay B Fort Gordon, GA 30906 (706) 791-1337/1496
Headquarters Department of the Army	DCS, G-2 (DAMI–OP) 1000 Army Pentagon Washington DC, 20310-1040 (703) 695–2803/2765	U.S. Army Geospatial Center (AGC) (CEAGC–WS), 7701 Telegraph Road Alexandria, VA 22315–3864 (703) 428–6895/DSN 328
Medical Command	DCS, G-2 (DAMI–OP) 1000 Army Pentagon Washington DC 20310-1040 (703) 695–2803/2765	U.S. Army Geospatial Center (AGC) (CEAGC–WS), 7701 Telegraph Road Alexandria, VA 22315–3864 (703) 428–6895/DSN 328

Table C–1
Staff points of contact for geospatial support—Continued

Command	Staff point of contact for GI&S support	Supporting Geospatial Activity
Intelligence and Security Command	Commander U.S. Army Intelligence and Security Command Attn: IAOPS–FM Fort Belvoir, VA 22060 (703) 706–7170/DSN 229	U.S. Army Geospatial Center (AGC) Attn: CEAGC–WS, 7701 Telegraph Road Alexandria, VA 22315–3864 (703) 428–6895/DSN 328
Military District of Washington	DCS, G-2 (DAMI–OP) 1000 Army Pentagon Washington DC, 20310-1040 (703) 695–2803/2765	U.S. Army Geospatial Center (AGC) Attn: CEAGC–WS, 7701 Telegraph Road Alexandria, VA 22315–3864 (703) 428–6895/DSN 328
U.S. Army Military Surface Distribution Command	DCS, G-2 (DAMI–OP) 1000 Army Pentagon Washington DC, 20310-1040 (703) 695–2803/2765	U.S. Army Geospatial Center (AGC) Attn: CEAGC–WS, 7701 Telegraph Road Alexandria, VA 22315–3864 (703) 428–6895/DSN 328
TRADOC	Commander U.S. Army Training and Doctrine Command Attn: ATIN–ZAD 33 Ingalls Road, Ft Monroe, VA 23651–1046 (757) 727–2505/DSN 680	Geospatial Products and Production: U.S. Army Geospatial Center (AGC) Attn: CEAGC–WS, 7701 Telegraph Road Alexandria, VA 22315–3864 (703) 428–6895/DSN 328 Staffing Actions: U.S. Army Maneuver Support Center Of Excellence ATTN: TCM Geospatial 14000 MSCOE Loop, Suite 104 Fort Leonard Wood, MO 65473-8929 (573) 563-8275
U.S. Army, Europe	Commander–in–Chief U.S. Army Europe and Seventh Army Attn: AEAEN–EO–MET APO New York 09014 Heidelberg Military DSN 370–8033	60th ENGR DET (GPC) HQ USAREUR /7th ARMY BLDG 01000, Room 2S03J Clay Kaserne Wiesbaden, Germany DSN 314–537-2754
U.S. Army, Pacific	USARPAC G-2	5th Geospatial Planning Cell (GPC) HQ, USARPAC G-2 Attn: APIN–OPM–GGIS Fort Shafter, HI 96858–5200 (808) 438–6305/DSN 438
U.S. Army Space and Missile Defense Command	Commander, USASMDC Attn: SMDC–IN P.O. Box 1500 Huntsville, AL 35807-3801 (256) 955–1450/DSN 645	USASMDC Attn: SMDC-IN-M (G-2 GEOINT) 350 Vandenberg Street Peterson AFB, CO 80914 (719) 554–1881/DSN 692
U.S. Army Special Operations Command	Commander, U.S. Special Operations Command Attn: AOIN–IOA–G Fort Bragg, NC 28307–5203 (919) 432–5280/DSN 239	U.S. Army Geospatial Center (AGC) Attn: CEAGC–WS, 7701 Telegraph Road Alexandria, VA 22315–3864 (703) 428–6895/DSN 328
U.S. Central Command (Army Components)	Commander, U.S. Central Command Attn: CCJ2–PS MacDill AFB, FL 33608–7001 (813) 830–6848/6850/ DSN 968	132nd Engineer Detachment 21714 Barnes Ave, Bay B Fort Gordon, GA 30906 (706) 791-1337/1496
U.S. Southern Command (Army Components)	Commander, U.S. Southern Command Attn: SCJ2–OP APO AA 34003–0150 011–507–82–3801/DSN 282	512th Engineer Detachment (GPC) U.S. Army South 4130 Stanley Rd, Bldg 1000, Suite 525 Joint Base Sam Houston, TX 78234 (210) 295-6323/DSN 421

Appendix D
Support Structure for Standard Geospatial Information and Services Products

D–1. Assistance with plans and requirements
Contact the geospatial staff point of contact (see app C).

D–2. Status of programs and production
Submit query through geospatial staff point of contact to DCS, G-2 (DAMI–OP), 1000 Army Pentagon, Washington DC 20310-1040.

D–2. Status of programs and production
Submit query through geospatial staff point of contact to DCS, G-2 (DAMI–OP), 1000 Army Pentagon, Washington DC 20310-1040.

D–4. Distribution support
Users submit requests for catalogs and reference publications to geospatial staff points of contact (see app B). Geospatial staff points of contact may endorse to:
DLA Aviation
DSCR–QAM, Bldg 66 C-Bay
8000 Jefferson Davis Highway
Richmond, VA 23297–5335
Message Address: DSCR RICHMOND VA//DSCR–QAM//

Comm: 804–279–6500
Toll Free: 800–826–0342
DSN: 695–6500
Submit requisitions for standard GI&S products or obtain over–the–counter service as listed in table D–1.

Table D–1
Map Support Office Over–the–Counter Services

CONUS MSO Locations	Over–the–Counter Services Provided
MSO NORFOLK: (SW3134) 581 A STREET BLDG SP–312 NORFOLK NAVAL STATION, VA 23511–4295 PHONE: (757) 445–2159	Limited Over–the–Counter Services
MSO SAN DIEGO: (SW3136) NAS NORTH ISLAND BLDG 654 ROGERS ROAD SAN DIEGO, CA 92135–7055 PHONE: (619) 545–6068	Limited Over–the–Counter Services
OCONUS MSO Locations	**Over–the–Counter Services Provided**
MSO HONOLULU: (SW3135) HANGAR 4 BLDG 2060 900 HANGAR AVENUE HICKAM AFB, HI 96853–5246 PHONE: (808) 449–7099	Limited Over–the–Counter Services
MSO JAPAN: (SW3150) BLDG J-39 ESOC YOKOSUSKA, JAPAN PHONE: DSN 315–243-3992/3993	Limited Over–the–Counter Services
MSO KOREA: (SW3161) UNIT 15764 APO AP 96260–5764 PHONE: COMM. 011–82–54–970–4182	Limited Over–the–Counter Services
MSO BAHRAIN: (SW3154) NSA–SWA PSC 451FPO AE 09834–2860 PHONE: DSN 318–439–3625	Limited Over–the–Counter Services
MSO GERMERSHIEM: (SW3133) CMR 425 BOX 700 APO AE 09095–0700 PHONE: DSN 314–378–5400	Limited Over–the–Counter Services
MSO NAPLES: (SW3137): PSC 817 BOX 42 FPO AE 09622–0042 PHONE: DSN 314–626–5280	Limited Over–the–Counter Services

Maps and charts may be ordered online after registering at DLA Mapping Customer Operations: http://www.avaition.dla.mil/rmf.

Appendix E
Geospatial Information and Services Requirements Submission Format

E–1. Submission
A request memorandum must be submitted for GI&S

E–2. Example
The format is provided at figure E–1.

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF STAFF
200 ARMY PENTAGON
WASHINGTON DC 20310-0200

MEMORANDUM FOR DCS, G-2(DAMI–OP), 1000 Army Pentagon, Washington DC, 20310-1040

SUBJECT: Request for Geospatial Information and Services (GI&S)

1. **Product Required**: Be specific, describe exactly what you need, including scale and/or resolution. ADRG, CADRG, DTED Level X, scanned maps, format conversions. See AR 115-11, paragraph 3. NGA can (normally) only provide DOD standard products, data and services. If your requirements are not listed in the above reference, call the DCS, G-2 Geospatial Team at (703) 695-2803/2765, DSN 329.

2. **Location:** Use corner geographic coordinates, scene number, or map sheet series and sheet numbers per current DLA map catalogs.

3. **Media Desired:** CD/DVD, hard drive and/or paper copy. Include number of each required.

4. **Priority**:
- Priority 1 - Mission/Exercise/Test will FAIL if data/service is not available.
- Priority 2 – Mission/Data/Test will experience SIGNIFICANT DEGRADATION if data/service is not available.
- Priority 3 – Mission/Data/Test will experience MINOR DEGRADATION if data/service is not available.

5. **Date Required:** Allow 180 days for production. Crisis requirements must include a detailed justification (see para 6). Some items may be able to be produced faster than 180 days. The DCS, G-2 Office will provide more details if required.

6. **Justification:** Justification should provide more details on project scope, desired results, supported organizations, systems to be used (hardware & software) or any other information pertaining to the data or products use. The smarter you can make the Army staff POC on your requirements/needs, the better we can justify/fight for production resources.

7. **Point of Contact:** Name, phone number and email for point of contact. Note, if requestor is a government contractor, requestor MUST be the government sponsor and must include contract number and expiration data. Also, provide a shipping address for product dissemination.

(Name)
(Rank)
(Commander or Program Manager)

Figure E–1. Example of memorandum for GI&S

Appendix F–1
Internal Control Evaluation

F–1. Function
The function covered by this evaluation is the Army GI&S Program.

F–2. Purpose
The purpose of this evaluation is to assist in evaluating the key internal controls outlined below. It is not intended to cover all controls.

F–3. Instructions
Answers must be based on the actual testing of key internal controls (for example, document analysis, direct observation, sampling, simulation). Answers that indicate deficiencies must be explained and corrective action indicated in supporting documentation. These key internal controls must be formally evaluated at least once every 3 years. Certification that this evaluation has been conducted must be accomplished on DA Form 11–2 (Internal Control Evaluation Certification).

F–4. Test questions
Questions for key internal controls are as follows:

a. Have the processes and procedures for receiving geospatial information from other systems been identified under a MOA, MOU, or ISA?

b. Have the processes and procedures for delivering geospatial information to other systems been identified under a MOA, MOU, or ISA?

c. Is a review of GI&S standards and metrics conducted annually with change requirements being identified, prioritized, reviewed, adopted and then incorporated into the annual Statement of Requirements?

d. Is the GI&S data collection memorandum being published annually?

e. Are the review of QAPs conducted annually with changes being identified, prioritized, reviewed and incorporated into the quality assurance plan program?

f. Are the AGE standard operating procedures or standard workflows being coordinated, reviewed and published annually?

g. Is training in support of the overall GI&S program conducted at all applicable PME sites?

h. Is AR 115–11 reviewed at least every 18 months and updated at a minimum of every 5 years, as required by AR 25–30?

F–5. Supersession
Not applicable.

F–6. Comments
Submit comments to the DCS, G-2 (DAMI–OP), 1000 Army Pentagon, Washington DC20310-1040.

Glossary

Section I
Abbreviations

ACOM
Army command

ACSIM
Assistant Chief of Staff for Installation Management

AGC
Army Geospatial Center

AGO
Army GEOINT Office

AGE
Army Geospatial Enterprise

AMC
U.S. Army Materiel Command

ARNG
Army National Guard

ARCIC
Army Capabilities Integration Center

ARSTAF
Army Staff

ASCC
Army service component command

CASCOM
Combined Arms Support Command

CCMD
Combatant Command

COE
Common operating environment

CONOPS
concept of operations

CONPLAN
contingency plan

COP
Common Operating Picture

CONUS
continental United States

DA
Department of the Army

DCS, G–1
Deputy Chief of Staff, G–1

DCS, G–2
Deputy Chief of Staff, G–2

DCS, G–3/5/7
Deputy Chief of Staff, G–3/5/7

DIA
Defense Intelligence Agency

DOD
Department of Defense

DOTMLPF
Doctrine, Organization, Training, Material, Leadership, Policy and Facilities

DRU
direct reporting unit

FORSCOM
U.S. Army Forces Command

GEOCOM
GEOINT Committee

GEOINT
Geospatial Intelligence

GI
Geospatial Information

GIG
Global Information Grid

GI&S
Geospatial Information and Services

GGDM
Ground-Warfighter Geospatial Data Model

GPC
Geospatial Planning Cell

HQDA
Headquarters, Department of the Army

INSCOM
U.S. Army Intelligence and Security Command

IPB
Intelligence Preparation of the Battlefield

ISA
installation service agreement

ISR
intelligence, surveillance, and reconnaissance

JCIDS
Joint Capabilities Integration and Development System

JCS
Joint Chiefs of Staff

LWN
LandWarNet

M&S
modeling & simulation

MDEP
management decision evaluation package

MGI and/or MGD
Military Geographic Information/Military Geographic Documentation

MILSTRIP
Military Standard Requisition and Issue Procedure

MSO
Map Support Office

NGA
National Geospatial–Intelligence Agency

NSC
Network Service Centers

NSG
National System for Geospatial-Intelligence

NSS
National Security Systems

OPLAN
operation plan

PEO
program executive officer

PM
program manager

PME
professional military education

POM
program objective memorandum

QAP
Quality Assurance Program

RDT&E
research, development, test and evaluation

SAP
Special Access Program

SCI
sensitive compartmented information

SDSFIE
Spatial Data Standards for Facilities, Infrastructure and Environment

SGE
Service GEOINT Element

SGO
Service GEOINT Office

SRP
Sustainable Range Program

SSGF
Standard and Sharable Geospatial Foundation

STANAG
standardization agreement

TCM
TRADOC Capabilities Manager

TGD
Theater Geospatial Database

TRADOC
U.S. Army Training and Doctrine Command

USACE
U.S. Army Corps of Engineers

USAES
U.S. Army Engineer School

USAR
U.S. Army Reserve

USGS
U.S. Geological Survey

Section II
Terms

Army Topography
Terrain analysis, map and map graphic overlay printing, precise positioning (survey) and digital products, normally expedient or tailored to the situation that is primarily in support of land combat. (See "topography.")

Cell
A bounded geographic area, normally of regular shape, used by NGA as a unit of issue for digital data. Cells of Digital Terrain Elevation Data Level 1 (DTED 1) and Digital Feature Analysis Data (DFAD) meas-ure 1 degree in longitude by 1 degree in latitude and are identified by the geographic coordinates of their southwest corners.

Chart
A special purpose map designed for navigation.

Crisis
An incident or situation involving a threat from a source external to the U.S., its territories, and possessions that rapidly develops and creates a condition of such diplomatic, political, or military importance to the Government that the commitment of U.S. military forces and/or resources is contemplated to achieve our national objectives.

Emergency Management Accreditation Program
Army Geospatial Support MDEP element. Funds Army-specific geospatial information products and services for

geospatial analyses, digital mapping, and crisis response not produced by the National Geospatial-Intelligence Agency (NGA) or other agencies. Supports the Army Geospatial Enterprise mission to provide a Common Operational Picture of the environment sharable by all users who require information about the terrain and region. Provides geospatial information and services that are beyond the intrinsic capabilities of Army field units and commanders. Provides geospatial engineering support for training, mission planning/rehearsal, and operations. Provides strategic, tactical, and high resolution terrain analysis, terrain battlefield visualization, urban terrain products, commercial imagery acquisition and analysis, water detection/well drilling support, hydrologic analyses, technical geospatial support, and emergency/ immediate response to CONUS and OCONUS Army requests synchronized with existing OPTEMPO. Supports Army field geospatial requirements from Theater through Brigade/Battalion levels. EMAP is a four character MDEP code, not an acronym.

Expedient product
A map, chart, digital data set, or other product made, because of resource or time constraints, to stand-ards short of the specifications for a standard product and that cannot fully support the intended functions.

Foundation data
A data set consisting of seven components (controlled and orthorectified monoscopic and sterioscopic imagery, digital elevation, bathymetry, vector features including air and navigation safety, and other globally maintained information such as gravity and magnetics) that is collected near worldwide, independent of missions, that is relatively stable (features change little over time or are updated regularly), accurate, and tied to a common geometry (WGS–84).

Geodesy
The science that determines the size and figure of the earth and its gravity field.

Geospatial information
The term "geospatial information" means information that identifies the geographic location and characteristics of natural or constructed features and boundaries on the earth and includes the following:

a. Statistical data and information derived from, among other things, remote sensing, mapping, and surveying technologies.

b. Mapping, charting, geodetic data, and related products.

Geospatial Information and Services
The concept for collection, information extraction, storage, dissemination, and exploitation of geodetic, geomagnetic, imagery, gravimetric, aeronautical, topographic, hydrographic, littoral, cultural, and toponymic data accurately referenced to a precise location on the earth’s surface. These data are used for military planning, training and operations including navigation, mission planning, mission rehearsal, modeling, simulation and precise targeting. Geospatial information provides the basic framework for battlespace visualization. It is information produced by multiple sources to common interoperable data standards. It may be presented in the form of printed maps, charts and publications; in digital simulations and modeling databases; in photographic form; or in the form of digitized maps and charts or attributed centerline data. Geospatial services include tools that enable users to access and manipulate data, and also includes instruction, training, laboratory support, and guidance for the use of geospatial data.

Map
A graphic representation of selected natural and artificial features on the earth’s surface or some part of it, usually on a flat medium such as paper, and generally using a planar coordinate system referenced to the earth’s surface. Maps generally show the approximate scale.

Military geographic documentation
Evaluated, processed, summarized, and published military geographic information. MGD also includes terrain analyses and studies. (See “military geographic information.”)

Military geographic information
Information concerning physical aspects, resources, and artificial features of the earth used for planning and operations. (See “military geographic documentation.”)

Nonstandard data
Data not identified in the Army mission needs statement for terrain data.a.

Qualified data
Geospatial data of known quality and accuracy that has been accepted by NGA for inclusion in the Framework, but the data has not been integrated or deconflicted with foundation data.

Reproducible material
A negative or positive transparency suitable for use as a master in lithographic printing.

Special product
A nonstandard map, chart, digital data set, or other product. Special products may be expedient, substitute, or tailored.

Substitute product
A map, chart, digital data set, or other product, not made to specifications agreed upon by the Military Services for standard products, that can fully support the intended functions of a standard product.

Survey
The act or operation of making measurements to determine relative positions of points on, above, or beneath the earth's surface.

Tailored product
A map, chart, digital data set, or other product designed to support a particular function at a particular time or place.

Terrain analysis
The process of analyzing and interpreting the earth's surface that includes manmade and natural features in combination with the influences of weather, climate and other relevant factors, to predict their effects on military operations.

Topography
The configuration of the earth's physical surface, to include relief and natural and manmade features. Topography may also refer to mapping or describing these features. (See "Army Topography.")

Section III
Special Abbreviations and Terms
This section contains no entries.