



Department of Defense INSTRUCTION

NUMBER 5000.56

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Incorporating Change 1, September 25, 2017

USD(I)

SUBJECT: Programming Geospatial-Intelligence (GEOINT), Geospatial Information and Services (GI&S), and Geodesy Requirements for Developing Systems

References: See Enclosure 1

1. PURPOSE. This Instruction reissues DoD Instruction (DoDI) 5000.56 (Reference (a)) in accordance with the authority in DoD Directive (DoDD) 5143.01 (Reference (b)) to update policy, responsibilities, and procedures for the identification and funding of GEOINT requirements for systems under development or upgrade consistent with DoDDs 5105.60 and 5000.01 and DoDI 5000.02 (References (c), (d), and (e)). All GI&S, imagery or geodesy data, product, or services are components of GEOINT and, for the purposes of this Instruction, shall hereafter be referred to as GEOINT.

2. APPLICABILITY. This Instruction applies to OSD, the Military Departments, the Office of the Chairman of the Joint Chiefs of Staff and the Joint Staff, the Combatant Commands, the Office of the Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities within the Department of Defense (hereafter referred to collectively as the "DoD Components").

3. DEFINITIONS. See Glossary.

4. POLICY. It is DoD policy that:

a. All acquisition programs relying on GEOINT data shall be designed to use standard GEOINT data whose content, formats, and standards conform to those established by the National System for Geospatial Intelligence (NSG) through community government processes.

b. All acquisition programs shall make maximum use of standard military data and digital databases provided by the National Geospatial-Intelligence Agency (NGA) and the NSG.

c. DoD Components shall consider the availability of NGA resources and the impact the use of unique GEOINT data, products, or services may have on the cost, schedule, or performance of system development or upgrades when unique GEOINT data, products, or services are required in the conduct of the system's operational mission profile.

5. RESPONSIBILITIES. See Enclosure 2.

6. PROCEDURES. See Enclosure 3.

7. RELEASABILITY. ~~UNLIMITED. This Instruction is approved for public release and is available on the Internet from the DoD Issuances Website at <http://www.dtic.mil/whs/directives>.~~ *Cleared for public release. This instruction is available on the Directives Division Website at <http://www.esd.whs.mil/DD/>.*

8. EFFECTIVE DATE. This Instruction is effective ~~immediately.~~ *July 9, 2010.*



James R. Clapper, Jr.

Under Secretary of Defense for Intelligence

Enclosures

1. References
 2. Responsibilities
 3. Procedures
- Glossary

ENCLOSURE 1

REFERENCES

- (a) DoD Instruction 5000.56, “Programming Unique Mapping, Charting, and Geodesy (MC&G) Requirements for Developing Systems,” September 11, 1991 (hereby cancelled)
- (b) DoD Directive 5143.01, “Under Secretary of Defense for Intelligence (USD(I)),” November 23, 2005, *as amended*
- (c) DoD Directive 5105.60, “National Geospatial-Intelligence Agency (NGA),” July 29, 2009
- (d) DoD Directive 5000.01, “The Defense Acquisition System,” May 12, 2003
- (e) DoD Instruction 5000.02, “Operation of the Defense Acquisition System,” ~~December 8, 2008~~ *January 7, 2015, as amended*
- (f) DoD Information Technology Standards Registry¹
- (g) Chairman of the Joint Chiefs of Staff Instruction 3900.01C, “Position (Point and Area) Reference Procedures,” June 30, 2007
- (h) Chairman of the Joint Chiefs of Staff Instruction 3901.01B, “Requirements for Geospatial Information and Services,” July 15, 2004
- (i) ~~Joint Publication 1-02-Office of the Chairman of the Joint Chiefs of Staff, “Department of Defense-DoD~~ Dictionary of Military and Associated Terms,” current edition

¹ <https://disronline.disa.mil/>

ENCLOSURE 2

RESPONSIBILITIES

1. UNDER SECRETARY OF DEFENSE FOR INTELLIGENCE (USD(I)). The USD(I) shall:

- a. Carry out the assigned responsibilities for GEOINT, in accordance with Reference (b).
- b. Adjudicate issues arising from this Instruction that cannot be resolved by direct NGA and DoD Component negotiations in consultation with appropriate oversight organizations as necessary.
- c. Recommend, when issues are adjudicated to require use of NGA resources, the DoD Component transfer funds in the amounts determined through the adjudication process to the appropriate NGA accounts.

2. DIRECTOR, NGA. The Director, NGA, under the authority, direction, and control of the USD(I), shall:

- a. Evaluate support requirements for GEOINT proposed by a DoD Component and submit the evaluation to the Head of the DoD Component and the USD(I) with recommendations.
- b. Through the GEOINT-Standards Working Group, develop, maintain, approve, disapprove, and set standards and specifications for data, products, and services that satisfy the coordinated and validated community GEOINT requirements. GEOINT standards are documented in the DoD Information Technology Standards Registry (Reference (f)). Developers shall normally document which GEOINT standards and specifications are required after Milestone B.
- c. Develop a schedule to satisfy the GEOINT requirements profile developed in paragraph 3.b. of this enclosure.
- d. Provide integrated, interoperable GEOINT, categorized into data domains (aeronautical, maritime, topographic, names, and elevation) and data densities (global, regional, local, and specialized), for all applicable emerging and future systems under development or upgrade.
- e. Determine and isolate the cost to the NGA of satisfying unique GEOINT requirements. All applicable expense elements shall be considered, including, but not limited to, ramp-up costs such as hiring and training of new personnel, site preparation, equipment procurement, and fixed plant investment as well as all costs for maintenance of full operating capability. Phase-down costs that would result from program cancellation or program completion should also be identified. General purpose items (e.g., mainframe computers) not specifically dedicated to a unique GEOINT requirement shall be funded by the NGA and shall not be considered in this process. Marginal costs in these categories specifically assessable as system-unique in

application shall initially be funded by the DoD Component that is the system-proponent, pending formal transfer of funds to the NGA.

f. Determine, for system-proponent and USD(I) coordination, the best value source for satisfying the unique GEOINT requirement by comparing the cost of in-house NGA resources with the cost of contracting with the commercial sector, another DoD Component, or with a trusted foreign co-producer. If contracted or assigned to a co-producer, the Director, NGA, shall still retain the responsibility for satisfying the requirement.

g. Within the developing system's engineering and manufacturing development (EMD) phase and before its Milestone C decision, prepare for USD(I) coordination a memorandum of agreement (MOA) with the appropriate system-proponent. The MOA must identify the annual GEOINT profiles, the attendant costs to be borne by the system-proponent and, if appropriate, the date at which the unique GEOINT data, product, or service would be categorized as a standard GEOINT data, product, or service, with any subsequent service funded within NGA's baseline. Implementing signatories shall be the Director, NGA, and the Head of the DoD Component that is the system-proponent.

h. Establish and maintain a list of DoD systems whose GEOINT requirements are satisfied by unique GEOINT products and services. The list shall have three parts:

(1) Pre-policy systems with unique requirements that are an established part of the NGA baseline funding.

(2) Systems with unique requirements that are less than the funding threshold specified in section 2 of Enclosure 3.

(3) Systems with unique requirements that are above the funding threshold specified in section 2 of Enclosure 3.

i. Request USD(I) adjudication, as appropriate, of issues arising from definition or funding of GEOINT data, products, or services.

3. HEADS OF THE DoD COMPONENTS, EXCLUDING DoD FIELD ACTIVITIES AND THE DIRECTOR, NGA. The Heads of the DoD Components, excluding the DoD Field Activities and the Director, NGA, shall:

a. For each system requiring unique GEOINT data, products, or services, consult with the Director, NGA, as to the requirements definition and all subsequent phases.

b. By Milestone B, have a system or subsystem model or prototype demonstrated in a relevant environment (technology readiness level 6, which is system prototype demonstrated in a relevant environment) for systems requiring unique GEOINT to achieve their key performance parameters in order to determine type and quantities of GEOINT required for operational employment. This is critical to ensure that adequate GEOINT production, storage, and

dissemination capabilities are available to support system fielding and employment. Consult with the Chairman of the Joint Chiefs of Staff and the Combatant Commanders, as appropriate, to examine deployment alternatives and to forecast area requirements and data density associated with initial fielding and full operational deployment. A GEOINT requirements profile shall be formulated based on the projected area requirements, projected data density levels, and the new system's unit acquisition rate and delivery schedule. Force planning must be considered as the deployment role of each system assessed.

c. Program for all system GEOINT marginal costs based on NGA-provided estimates. The programmed funding shall be explicitly identified with the system development program element in all program and budget exhibits. Sufficient funding shall be maintained to provide for necessary start-up, continuation, and phase-down of NGA efforts, pending formal biennial transfer of funds to the NGA.

d. Within the developing system's EMD phase and before the Milestone C decision, enter into an MOA with the NGA covering GEOINT support profiles and the attendant costs.

e. Ensure proper consideration is given to GEOINT topics during component acquisition review and in the development process.

f. Request USD(I) adjudication, as appropriate, of issues arising from definition or funding of GEOINT data, products, or services.

g. For each system requiring unique GEOINT data, products, or services, consult with the Director, NGA, as to the proper classification of the data, product, or service provided.

ENCLOSURE 3

PROCEDURES

1. Navigation and positioning systems shall be based on NGA standards for conversion into the Universal Transverse Mercator System, Military Grid Reference System, and the World Geodetic System 1984 datum or follow-on system. In accordance with Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3900.01C (Reference (g)), developers shall coordinate with NGA to ensure systems utilizing position information meet necessary standards and accuracies.
2. If a system requires unique GEOINT resources (data, products, or services) which require NGA resources in a Future Year Defense Program in excess of \$3.3 million (based on fiscal year (FY) 2009 constant dollars) for research, development, testing, and evaluation or more than \$10.0 million (based on FY 2009 constant dollars) for procurement, then the system must fund the total costs for provision of the data, products, or services. A system requiring unique GEOINT resources below the threshold shall compete for the NGA's baseline resources in the normal program objectives memorandum process. Use of this process is independent of designation of a program as an acquisition program or a major system under References (c) and (d). New or upgraded systems that require an increase in coverage above the standard GEOINT data, products, or services or require an increase, regardless of the amount, in production are not covered by this Instruction and shall compete for existing NGA production resources through procedures outlined in CJCSI 3901.01B (Reference (h)).
3. GEOINT requirements are derived from the initial capabilities document (ICD) for Milestone A and subsequent milestones, as provided in Reference (d). Consequently, as an "infrastructure support" component, GEOINT requirements are subject to consideration at all system milestone reviews. Using the GEOINT requirements defined in the ICD, the NGA and applicable DoD Component(s) shall identify any unique GEOINT data, product, or service requirements and program funding support for the identified unique requirements.
4. Biennial transfers of funds will usually commence between milestones B and C and will continue as specified in an MOA. A program budget decision will make a transfer of funds for each 2-year budget cycle. If NGA cost estimates are revised subsequent to the transfer, it shall be NGA's responsibility to notify the USD(I) to make the appropriate changes.
5. If a new system is a functional replacement or otherwise affects force structure, the associated GEOINT requirement may supplant or truncate earlier requirements, reducing the net marginal cost to the NGA, and thus may reduce funding requirements levied on the system-proponent DoD Component.

GLOSSARY

PART I. ABBREVIATIONS AND ACRONYMS

CJCSI	Chairman of the Joint Chiefs of Staff Instruction
DoDD	DoD Directive
DoDI	DoD Instruction
EMD	engineering and manufacturing development
FY	fiscal year
GEOINT	geospatial intelligence
GI&S	geospatial information and services
ICD	initial capabilities document
MOA	memorandum of agreement
NGA	National Geospatial-Intelligence Agency
NSG	National System for Geospatial Intelligence
USD(I)	Under Secretary of Defense for Intelligence

PART II. DEFINITIONS

Unless otherwise noted, these terms and their definitions are for the purpose of this Instruction.

GEOINT. Defined in ~~Joint Publication 1-02~~ *the DoD Dictionary of Military and Associated Terms* (Reference (i)).

GI&S. The collection, information extraction, storage, dissemination, and exploitation of geodetic, geomagnetic, imagery (both commercial and national source), gravimetric, aeronautical, topographic, hydrographic, littoral, cultural, and toponymic data accurately referenced to a precise location on the Earth's surface. Geospatial services include tools that enable users to access and manipulate data, and also include instruction, training, laboratory support, and guidance for the use of geospatial data. GEOINT is used in military planning, training, and operations, including navigation, mission rehearsal, modeling, simulation, and precise targeting.

NSG. Defined in Reference (c).

system-proponent. DoD Component assigned program management responsibilities for the system's acquisition.

unique GEOINT data, product, or service. Any GEOINT data, product, or service that is not already provided through NGA gateway, Defense Logistics Agency, or under a negotiated agreement with user.