

GPC-F

Essential Body of Work & Knowledge (EBW/EBK)  
 GEOINT Professional Certification - Fundamentals: Proficiency Level I  
 8 February 2017 (current version can be found at <http://gpc.nga.ic.gov>)



## Core Competency 1 - Analytic Processes and Techniques (8%)

Gains and applies knowledge of basic analytical processes and techniques used in GEOINT problem solving, including documenting processes, employing analytic processes, evaluating processes and results and drawing conclusions.

### Terminal and Enabling Certification Objectives (TCOs & ECOs)

<b>TCO</b>	<b>TCO 1: COMPREHEND the fundamental GEOINT concepts and principles used in basic analytical processes and techniques to solve GEOINT problems.</b>
<b>ECO</b>	ECO 1.1: Discuss principles of Geospatial Analysis.
<b>ECO</b>	ECO 1.2: Discuss the principles of Imagery Analysis.
<b>ECO</b>	ECO 1.3: Discuss cartographic principles used in basic analytical processes and techniques.
<b>ECO</b>	ECO 1.4: Discuss the role of Human Geography as a discipline in GEOINT.
<b>ECO</b>	ECO 1.5: Discuss the use of sensor phenomenology in basic analytical processes and techniques.
<b>ECO</b>	ECO 1.6: Discuss navigation safety related GEOINT.
<b>ECO</b>	ECO 1.7: Discuss basic geodesy principles used in basic analytical processes and techniques.
<b>ECO</b>	ECO 1.8: Describe how the Global Positioning System supports DoD, civil, and commercial activities.
<b>ECO</b>	ECO 1.9: Discuss the principles of Bathymetry and Hydrography.
<b>TCO</b>	<b>TCO 2: COMPREHEND analytical processes and techniques used to solve GEOINT problems.</b>
<b>ECO</b>	ECO 2.1: Describe analytical processes used in GEOINT Analysis.
<b>ECO</b>	ECO 2.2: Discuss the importance of historical GEOINT research in the analytical process.
<b>ECO</b>	ECO 2.3: List fundamental capabilities and uses of analytical tools used to exploit geospatial data.
<b>ECO</b>	ECO 2.4: Describe GEOINT analytical problem solving techniques.
<b>ECO</b>	ECO 2.5: Discuss Foundation Imagery Processing (i.e., orthorectification, mosaicking, triangulation, map/imagery correlation).
<b>TCO</b>	<b>TDCO 3: COMPREHEND the various analytical tradecrafts that contribute to solving GEOINT problems.</b>
<b>ECO</b>	ECO 3.1: Compare and contrast missions of the various GEOINT analytic tradecrafts.

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## Core Competency 2 - Collection and Tasking Principles (9%)

Gains and applies knowledge of the principles of evaluating sources, applying querying and tasking processes to obtain required data, and comprehending collection requirements, tools, processes, and policy.

### Terminal and Enabling Certification Objectives (TCOs & ECOs)

<b>TCO</b>	<b>TCO 4: COMPREHEND foundational GEOINT collection and tasking principles.</b>
<b>ECO</b>	ECO 4.1: Describe characteristics, capabilities, and applications of GEOINT collection systems.
	ECO 4.2: Describe types, capabilities, and limitations of imagery collection systems, including optical, radar, infrared, and motion video sensors.
	ECO 4.3: Define GEOINT target types (e.g. Point, LOC, DSA)
	ECO 4.4: Discuss tasking principles for GEOINT collection assets (e.g., NTM, OPIR, airborne, and commercial).
	ECO 4.5: Define GEOINT Tasking, Collection, Processing, Exploitation, Dissemination (TCPED) Process.
	ECO 4.6: Define Essential Elements of Information (EEL).

## Core Competency 3 - Customer Requirements and Service (10%)

Works with internal and external customers to understand their mission and needs, defines and guides GEOINT collection and production requirements, and delivers tailored and timely GEOINT while managing customer expectations.

### Terminal and Enabling Certification Objectives (TCOs & ECOs)

<b>TCO</b>	<b>TCO 5: COMPREHEND GEOINT products, services, and customers.</b>
<b>ECO</b>	ECO 5.1: Discuss how various customer categories (e.g., military, national policy makers, military agency liaisons) use GEOINT products and services.
	ECO 5.2: List the various National System for Geospatial Intelligence (NSG) products and services.
	ECO 5.3: Recognize members of the National System for Geospatial Intelligence (NSG) community in terms of their respective missions.

## Core Competency 4 - Data Evaluation Principles (9%)

Gains and applies knowledge of the basic principles and techniques used in the evaluation of the usefulness and quality of geospatial and related data to support the GEOINT mission.

### Terminal and Enabling Certification Objectives (TCOs & ECOs)

<b>TCO</b>	<b>TCO 6: COMPREHEND tools and methods used to evaluate the usefulness and quality of geospatial and related data.</b>
<b>ECO</b>	ECO 6.1: Discuss the role and function of the National Imagery Interpretability Rating Scale (NIIRS)
	ECO 6.2: List the tools used to exploit geospatial and related data.

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**TCO** **TCO 7: COMPREHEND standards and criteria used in the processing and exploitation of geospatial and related data.**

- ECO**
- ECO 7.1: Discuss the role and function of the GEOINT Data Standards (e.g., metadata, tagging/exploitation, projection, accuracy).
  - ECO 7.2: Discuss the role and function of the GEOINT Data Selection criteria.
  - ECO 7.3: Define accuracy as it relates to geospatial source analysis, preparation, and evaluation.
  - ECO 7.4: Discuss the importance of sourcing and citations in the processing and exploitation of geospatial and related data.

### Core Competency 5 - Geospatial Information (9%)

Gains and applies knowledge of geospatial information principles, including software, data, analytic techniques, and visualization to display and analyze spatial data.

Terminal and Enabling Certification Objectives (TCOs & ECOs)

**TCO** **TCO 8: COMPREHEND the foundational Geographic Information System (GIS) principles.**

- ECO**
- ECO 8.1: Define Geographic Information System (GIS).
  - ECO 8.2: Recognize operations associated with a Geographic Information System.
  - ECO 8.3: Describe functions of a Geographic Information System.
  - ECO 8.4: Identify components of the Geographic Information System (GIS).

**TCO** **TCO 9: COMPREHEND how GIS tools are used to display and analyze geospatial data.**

- ECO**
- ECO 9.1: Describe basic functionalities of imagery exploitation system tools.
  - ECO 9.2: Define utility of Spatial Statistics.
  - ECO 9.3: Describe the basic concepts associated with coordinate systems.
  - ECO 9.4: Discuss concepts of Data Science for geospatial information.

### Core Competency 6 - GEOINT Doctrine (7%)

Gains and applies knowledge of standards, policies, practices, and authorities governing GEOINT.

Terminal and Enabling Certification Objectives (TCOs & ECOs)

**TCO** **TCO 10: COMPREHEND the foundational concepts and terminologies common to the GEOINT community.**

- ECO**
- ECO 10.1: Define GEOINT.
  - ECO 10.2: Describe the four components of GEOINT (i.e., discipline, data, process, products).
  - ECO 10.3: Compare and contrast the three elements of GEOINT (i.e., Imagery, Imagery Intelligence, and Geospatial Information).
  - ECO 10.4: State the importance of GEOINT as it applies to the National System for Geospatial Intelligence.

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<b>TCO</b>	<b>COMPREHEND the foundational concepts and principles associated with regulations, guidelines, laws, and directives governing the GEOINT community.</b>
<b>ECO</b>	ECO 11.1: Discuss GEOINT's role in national security.
<b>ECO</b>	ECO 11.2: Discuss the roles and responsibilities of the Defense GEOINT Functional Manager.
<b>ECO</b>	ECO 11.3: Discuss the purpose of the GEOCOM.
<b>Core Competency 7 - Information Dissemination (10%)</b> Information Dissemination distributes information, intelligence, and data to mission partners, organizations, and individuals to support GEOINT mission and requirements.	
Terminal and Enabling Certification Objectives (TCOs & ECOs)	
<b>TCO</b>	<b>COMPREHEND the foundational GEOINT processing and exploitation concepts and principles.</b>
<b>ECO</b>	ECO 12.1: Compare and contrast finished versus raw intelligence.
<b>TCO</b>	<b>COMPREHEND information dissemination tools and methods.</b>
<b>ECO</b>	13.1: Describe various GEOINT data retrieval and research techniques.
<b>ECO</b>	13.2: Describe Functionalities of various GEOINT Software Applications (e.g., IESS, NES, CAWS, RSS).
<b>ECO</b>	13.3: Describe application of various GEOINT dissemination methods (e.g., DCGS).
<b>Core Competency 8 - Intelligence Issues (5%)</b> Knowledge of broad intelligence-related issues, with an emphasis on the National Intelligence Priority Framework (NIPF) and derivatives, National System of Geospatial-Intelligence (NSG) priorities, tactical needs, regional awareness and common operating picture.	
Terminal and Enabling Certification Objectives (TCOs & ECOs)	
<b>TCO</b>	<b>TCO 14: COMPREHEND GEOINT priorities.</b>
<b>ECO</b>	ECO 14.1: Describe where GEOINT intelligence/issue priorities could be found (e.g. NIPF/DIPF).
<b>TCO</b>	<b>TCO 15: COMPREHEND concepts and principles associated with customer operations and requirements that influence GEOINT priorities.</b>
<b>ECO</b>	ECO 15.1: Define the GEOINT Program of Analysis (GPOA).
<b>ECO</b>	ECO 15.2: Describe the concepts of Key Intelligence Question (KIQ).
<b>ECO</b>	ECO 15.3: Discuss how the GEOINT Operations process supports national and defense missions.
<b>ECO</b>	ECO 15.4: Describe how GEOINT supports Intelligence Planning.
<b>ECO</b>	ECO 15.5: Discuss the concept of situational awareness and its influence on GEOINT prioritization.
<b>Core Competency 9 - National System for Geospatial Intelligence (NSG) (4%)</b> Knowledge of the membership, responsibilities, and mission of the National System for Geospatial Intelligence (NSG).	

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Terminal and Enabling Certification Objectives (TCOs & ECOs)

<b>TCO</b>	<b>TCO 16: COMPREHEND the foundational knowledge of the National System for Geospatial Intelligence (NSG).</b>
<b>ECO</b>	ECO 16.1: List members and partners that make up the National System for Geospatial Intelligence (NSG).
	ECO 16.2: Explain the importance of the National System for Geospatial Intelligence (NSG).
	ECO 16.3: Describe the GEOINT capabilities of the various National System for Geospatial Intelligence (NSG) members and partners.
	ECO 16.4: Explain how GEOINT is used by various customer organizations (e.g., Combatant Commands, national agencies) and in the National Defense Strategy.
	ECO 16.5: List tasks common to all National System for Geospatial Intelligence (NSG) members.

**Core Competency 10 - Quality Assurance (9%)**

Role of GEOINT Quality Assurance in GEOINT processing and exploitation.

Terminal and Enabling Certification Objectives (TCOs & ECOs)

<b>TCO</b>	<b>TCO 17: COMPREHEND the role of GEOINT Quality Assurance in GEOINT processing and exploitation.</b>
<b>ECO</b>	ECO 17.1: Discuss the Intelligence Community Analytic Standards.
	ECO 17.2: Describe how GEOINT Quality Assurance is critical to analysis, planning and operations.

**Core Competency 11 - Research and Information Gathering (11%)**

Applies strategies, techniques, and technologies to identify, acquire, and filter sources and information.

Terminal and Enabling Certification Objectives (TCOs & ECOs)

<b>TCO</b>	<b>TCO 18: COMPREHEND tools and methods for identifying, acquiring, and filtering sources and information.</b>
<b>ECO</b>	ECO 18.1: Identify portals for exploring, discovering, querying, and retrieving GEOINT data.
	ECO 18.2: Discuss the use of the NSG database archives for GEOINT.
	ECO 18.3: Discuss the functions of cross-agency data environments.
	ECO 18.4: Discuss the importance of knowledge capture in documenting GEOINT processes, techniques, and methods.

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## Core Competency 12 - Security Classification Control and Disclosure/Release (9%)

Applies knowledge of the policies and procedures involved with classification, control, and disclosure/release of information, intelligence, and data throughout the production cycle.

### Terminal and Enabling Certification Objectives (TCOs & ECOs)

<b>TCO</b>	<b>TCO 19: COMPREHEND policies and procedures for operationally classifying, marking, handling, and safeguarding protected concepts and terminologies.</b>
<b>ECO</b>	ECO 19.1: Discuss the purpose, requirements for, and use of GEOINT-specific Classification Markings.
<b>ECO</b>	ECO 19.2: Discuss the purpose, requirements for, and use of GEOINT Security Classification Guidelines.
<b>ECO</b>	ECO 19.3: Discuss the purpose, requirements for, and use of GEOINT Disclosure and Release Policies and Guidelines.
<b>ECO</b>	ECO 19.4: Discuss the purpose, requirements for, and use of GEOINT Destruction and Disposal Guidelines.
<b>ECO</b>	ECO 19.5: Discuss the purpose, requirements for, and use of GEOINT Sanitization Guidelines.