



Essential Body of Knowledge (EBK)

GEOINT Professional Certification - Human Geography: Proficiency Level II

27 January 2023

Core Competency 1 - GEOINT Fundamentals and Human Geography Relevance (24%)

Gain and apply knowledge of GEOINT fundamentals and understand relevance of human geography.

Terminal and Enabling Certification Objectives (TCOs & ECOs)

TCO 1: Apply basic cartographic, imagery interpretation, and geospatial analysis principles.

ECO 1.1: Understand the general features of datums and projections.

ECO 1.2: Describe the essential components of a map.

ECO 1.3: Describe the essential elements of cartography.

ECO 1.4: Read and interpret maps, charts, and data to extract human geography content.

ECO 1.5: Apply the principles of imagery interpretation to identify or describe a given object, activity, facility, or area on imagery.

ECO 1.6: Use cultural keys or soft copy keys to identify cultural features on imagery.

ECO 1.7: Understand the principles and data structures required to perform spatial analysis.

ECO 1.8: Understand the basic concepts of temporal analysis.

TCO 2: Comprehend the relevance of human geography.
ECO 2.1: Understand how human geography enriches GEOINT.
ECO 2.2: Understand the characteristics of human populations that would be of interest to customers.
ECO 2.3: Understand how human geography can address key intelligence questions and requirements.
TCO 3: Comprehend how human geography complements other intelligence disciplines.
ECO 3.1: Describe the inter-relationship of human geography and other intelligence disciplines.
ECO 3.2: Understand the need for collaboration among Intelligence Community (IC) agencies and other partners.
ECO 3.3: Understand NGA's role in the IC as provider and functional manager of human geography for the National System for Geospatial Intelligence (NSG).
ECO 3.4: Understand how human geography can inform policy maker decisions.
TCO 4: Understand how biases and spatial thinking influence GEOINT.
ECO 4.1: Understand the role of cognitive biases in creation or maintenance of human geography data.
ECO 4.2: Understand the role of cultural bias in observing, creating, and explaining human geography data.

ECO 4.3: Understand geospatial thinking and its impacts on the decision-making process.
Core Competency 2 - Human Geography Concepts (26%) Demonstrate knowledge of human geography concepts, themes, and terms. Understand the various subfields of human geography, their relevance to National System for Geospatial Intelligence (NSG) requirements, and identify related academic fields of study.
Terminal and Enabling Certification Objectives (TCOs & ECOs)
TCO 5: Understand how physical features influence social dynamics.
ECO 5.1: Understand how the physical environment can influence social dynamics.
ECO 5.2: Understand how access to resources can affect social dynamics.
ECO 5.3: Understand how human-environment interactions influence societal development and activities.
ECO 5.4: Understand how climate affects populations.

TCO 6: Understand concepts and terminology important to human geography.
ECO 6.1: Understand fundamental tenets of major religions.
ECO 6.2: Recognize broad spatial patterns of language families across the globe.
ECO 6.3: Understand terms and concepts related to language and linguistics.
ECO 6.4: Understand the core concepts and impacts of imperialism and colonialism.
ECO 6.5: Understand how human geography methods can help identify instability.
ECO 6.6: Understand core concepts and terminology related to religion.
ECO 6.7: Understand the core concepts and impacts of globalization and isolationism.
ECO 6.8: Understand terms and concepts related to social and collective identity as used in the National System for Geospatial Intelligence (NSG).
ECO 6.9: Understand the core concepts of health geography.
ECO 6.10: Comprehend core concepts of economic geography.
TCO 7: Comprehend concepts of political geography.

ECO 7.1: Define the terms nation, state, nation-state, multinational state, and country.
ECO 7.2: Understand the difference between administrative boundaries and cultural regions.
ECO 7.3: Recognize and define key terms related to internal administrative boundaries.
ECO 7.4: Recognize and define key terms related to international boundaries.
ECO 7.5: Recognize and define key terms related to maritime limits and boundaries.
ECO 7.6: Know the basic definitions of maritime zones under the Law of the Sea.
ECO 7.7: Understand concepts of neighborhood boundaries.
ECO 7.8: Define cultural transference.
ECO 7.9: Understand the importance of place to human society.
ECO 7.10: Understand concepts of informal settlements.
TCO 8: Apply the core concepts of demography relevant to human geography.
ECO 8.1: Apply basic demographic concepts and terminology related to population change such as migration, fertility, and mortality.

ECO 8.2: Understand how to interpret demographic data.
ECO 8.3: Understand the terms urbanity and rurality and their implications.
Core Competency 3 - Data Discovery, Conditioning, and Management (26%) Formats, catalogs, and/or filters data and information obtained from various sources to facilitate data access, integration, and interpretation.
Terminal and Enabling Certification Objectives (TCOs & ECOs)
TCO 9: Demonstrate knowledge of NGA storage systems for imagery, foundation geospatial data, and commodity (commercial) data.
ECO 9.1: Demonstrate knowledge of the use and access of common NGA geospatial repositories.
ECO 9.2: Demonstrate knowledge of the use and access of NGA imagery and remote sensing data repositories.
TCO 10: Demonstrate knowledge of human geography data sources.
ECO 10.1: Understand the function and utility of open source data and information.
ECO 10.2: Recognize common commercial and National System for Geospatial Intelligence (NSG) databases, search engines, and resources from which open source data can be obtained.
ECO 10.3: Describe ways to mitigate operational security risks when researching intelligence topics on the internet.
ECO 10.4: Understand different strategies for querying databases and large sets of data.

TCO 11: Apply geospatial standards for data creation and use.
ECO 11.1: Know the elements of GEOINT Extraction Guidance and how it can be used to create standardized geospatial data.
ECO 11.2: Understand the purpose, function, and management process of the National System for Geospatial Intelligence (NSG) Application Schema (NAS).
ECO 11.3: Apply the appropriate data schema in the structuring of geospatial data.
ECO 11.4: Understand the importance of human geography data attribution standards.
ECO 11.5: Understand NSG Metadata Foundation (NMF) standard fields.
ECO 11.6: Understand the legal basis of geographic names standardization.
ECO 11.7: Understand sourcing of human geography information.
ECO 11.8: Recognize differences between authoritative and non-authoritative sources for geographic names.
ECO 11.9: Understand the relevance of geographic names standardization.
ECO 11.10: Understand the use of Board on Geographic Names (BGN) country policies in the creation and maintenance of standardized geographic names data.
ECO 11.11: Comprehend the importance of metadata tagging for human geography datasets.

TCO 12: Apply Geographic Information System (GIS) tools and techniques to create, condition, and manage human geography data.
ECO 12.1: Create datasets within a GIS platform following a given data schema.
ECO 12.2: Construct a geospatial dataset from unstructured information and graphics.
ECO 12.3: Demonstrate how to create and modify geospatial data - both geometry and attribution.
ECO 12.4: Describe the importance of data management and conditioning.
ECO 12.5: Comprehend how to transform data and information from unstructured to structured.
ECO 12.6: Understand unstructured and structured geospatial data and their uses.
ECO 12.7: Understand how to service-enable human geography content to maximize shareability.
ECO 12.8: Understand the importance of consistency within and across data sets, including usage of fields, naming conventions, terms, definitions, and delimiters.
ECO 12.9: Apply multiple intelligence sources to add value to human geography production.
Core Competency 4 - Production (24%) Create and edit products, data, and/or services to meet customer needs and requirements using relevant source materials, data, and tools. Demonstrate knowledge of relevant products and services.
Terminal and Enabling Certification Objectives (TCOs & ECOs)

TCO 13: Recognize the appropriate classification and dissemination markings to apply to both geospatial data and intelligence products.

ECO 13.1: Recognize the appropriate classification and control markings to apply to products, datasets, and services.

ECO 13.2: Know which sources to consult when determining classification and dissemination markings for products, datasets, and services.

TCO 14: Understand how human geography data is produced and used within the National System for Geospatial Intelligence (NSG).

ECO 14.1: Know the types of products, reports, and data formats that result from human geography production.

ECO 14.2: Understand the process to create a finished intelligence or Foundation GEOINT product.

ECO 14.3: Understand how to publish GEOINT products.

TCO 15: Apply the policy, standards, and processes for geographic names entered into the Geographic Names Database (GNDB).

ECO 15.1: Understand the differences between translation and transliteration.

ECO 15.2: Understand the U.S. government's policies on the use of toponyms and romanization systems.

ECO 15.3: Apply proper methods to collect geographic names.

ECO 15.4: Apply transliteration.

TCO 16: Describe the extraction policy, standards, and processes for geographic boundaries entered into the Digital Boundaries (DiB) data portal.
ECO 16.1: Understand the U.S. government's policy on depiction of international boundaries and disputed areas on official government products.
ECO 16.2: Recognize authoritative sources for geographic boundaries.
ECO 16.3: Understand proper methods for geographic boundaries collection and extraction.
ECO 16.4: Understand the relationship between political boundaries and physical/cultural features.
TCO 17: Understand how National System for Geospatial Intelligence (NSG), Department of Defense (DoD), and Intelligence Community (IC) requirements processes shape human geography production.
ECO 17.1: Understand intelligence and NSG customer requirements that can or cannot be satisfied by human geography data and information.
ECO 17.2: Describe how Key Intelligence Questions (KIQ) impact human geography production.
ECO 17.3: Understand the importance of defining project scope.