NATIONAL IMAGERY AND MAPPING AGENCY

National System for Geospatial Intelligence

STATEMENT OF WORK

For the RFP

MODERNIZATION CONTRACT

For Architecture and Infrastructure Modernization

RFP Version 1.0

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Statement of Work
For
NSGI GeoScout Contract

1.0 SCOPE.

1.1 BACKGROUND

The National System for Geospatial Intelligence (NSGI) is the integration of technology, policies, standards, mission and corporate capabilities, services and doctrine necessary to conduct Geospatial Intelligence in a multi-intelligence (multi-INT) environment. NIMA, as a corporate enterprise and as the functional manager of the NSGI, is transforming to enhance its position as the premier Geospatial Intelligence provider.

The GeoScout contract is the principal vehicle for delivering transformed NIMA mission and corporate capabilities. The GeoScout contractor will be responsible for conducting enterprise system integration and providing capabilities that support the integration of NIMA's corporate and mission information. GeoScout is a bold new approach for how NIMA will simultaneously improve the existing infrastructure, while delivering dramatic, new capabilities – the best the commercial world has to offer. GeoScout's scope is broad, focusing not only on NIMA's systems, but also on the policies, processes, services, standards, infrastructure, architecture, systems, and change management that comprise the complete NSGI to include the corporate environment. The goal of the GeoScout contract is to enable the transformation of NIMA to an agile fully capable enterprise that anticipates and adapts quickly to changing business and customer information needs.

The transformation precepts identified below are detailed in the NSGI Enterprise Transformation Integrated Product Team (NETIPT) Final Report. These precepts will guide NIMA's activities toward achieving our desired future state. These precepts will also set the direction NIMA must take to transform into an agile, elite intelligence organization that meets our customers' increasing requirements for mission capability and performance.

Simply stated, the 10 Precepts represent an overview of the areas that must be addressed to realize the goals of NIMA's Statement of Strategic Intent. The precepts are framed in the context of three areas intrinsic to all organizations – people, process, and technology –and call for NIMA to:

1. Sustain Leadership Commitments
2. Create and Foster a World-Class Workforce
3. Modernize the Workplace
4. Implement a Customer-Focused Business Model
5. Deliver the Future Enterprise Architecture Using GeoScout
6. Exploit All Sensor Types and Sources
7. Institutionalize a Data-Centric Architecture
8. Strengthen the Geospatial Intelligence Functional Manager's Role

9. Ensure NIMA's Unique Value-Added Mission Contribution
10. Effectively Communicate the Progress of Transformation

To accomplish the goals identified in the NIMA Statement of Strategic Intent, NIMA must fundamentally change its processes for systems acquisition and continuous technology insertion. Therefore, NIMA is adhering to Department of Defense (DoD) policies for evolutionary acquisition and spiral development as described in Section 1.2.

The GeoScout contract serves as the primary mechanism to realize Precepts 3 through 7. Full enterprise transformation requires incorporation of new business processes through change management and new technologies, leveraging emerging commercial trends. This requires a new architecture as a basis, one that merges the tools and systems needed for the creation and management of Geospatial Intelligence. GeoScout will design, develop and deliver this architecture. Since state-of-the-art information and data creation, integration and access are essential to satisfying NIMA's mission, this architecture must be data-centric. Thus, GeoScout will fulfill Precept 7, Institutionalize a Data-Centric Architecture. GeoScout will also satisfy Precept 6, Exploit All Sensor Types and Sources, by providing new capabilities and technologies that are needed to better exploit commercial imagery, airborne imagery and National Technical Means (NTM) in an integrated manner. GeoScout will also help satisfy Precept 4, Implement a Customer-Focused Business Model, by providing robust collaboration tools as well as a new, end-to-end information management capability. GeoScout will establish new business processes, business rules and performance metrics across the enterprise.

Finally, GeoScout will also help satisfy Precept 3, Modernize the Workplace, by accelerating the investment in infrastructure. The NIMA Enterprise Geospatial Intelligence Environment (ENGINE) Program was initiated to create NIMA's Information Technology Infrastructure (ITI). The patchwork approach of the past has left NIMA's existing infrastructure unable to meet current or future requirements. User expectations for a robust, dependable and serviceable infrastructure are not being met. The ENGINE program was initiated to begin the transformation of the ITI, to correct current deficiencies and provide a solid infrastructure that satisfies NIMA's operational needs while implementing the GeoScout architecture. The ENGINE program has seven focus areas: Network Transport Layer, Telephone System Upgrade, Workstation Recap, Enterprise Management, Information Management, Data Storage and Management, and Computer Network Defense. The first three focus areas (networks, telephones and workstations) are near term activities targeted by the NETIPT to be completed by FY04 (funding permitting) using an appropriate mix of existing and planned contracts.

1.2 Acquisition Approach

NIMA is embracing an evolutionary acquisition and spiral development approach as well as a focus on shifting from a classic requirements driven, vertical segmented construct to a capabilities based, customer-focused construct.

Key definitions of this approach, taken from The Under Secretary of Defense for Acquisition, Technology, and Logistics Memorandum Subject: "Evolutionary Acquisition and Spiral Development", 12 April 2002, are in Appendix A.

In this new systems acquisition paradigm, NIMA's systems engineering and acquisition activities are consolidated into three major contracts: the Enterprise Engineering contract, the GeoScout systems integration contract, and existing Operations and Sustainment (O&S) contracts. The NSGI legacy and heritage system contracts, to include both mission and corporate applications/systems (e.g. Requirements Management System (RMS), Image Product Library (IPL), Information Dissemination Services (IDS), Integrated Exploitation Capability (IEC), PeopleSoft) will initially continue, but will be expeditiously phased out as the GeoScout contractor inserts modern capabilities that replace them.

1.3 GOVERNMENT OBJECTIVES

The Government's objective is to modernize, acquire, deploy, and maintain an affordable, flexible, reliable, and easily scalable NSGI that meets customers' current and future expectations. The modernized NSGI will permit rapid adaptation to changing mission needs and collection strategies through rapid and continuous technology insertion and implementation of Standards-based Commercial-Off-the-Shelf (SCOTS) solutions. Technology insertion via GeoScout will serve as the engine to continuously transform NIMA. Government goals include:

1. Provide clear accountability in systems integration while permitting maximum contractor flexibility during system design and development.

2. Transform NIMA's infrastructure into a fully modernized Information Technology (IT) environment that supports mission and corporate operations and will fully support the modernized NSGI architecture. Modernize the IT environment in a manner that is cost effective, seamless to operations, and enhances workforce effectiveness and efficiency. Integrate NIMA's networks, systems, applications and databases so that the needed content can be quickly and easily retrieved and delivered electronically. This environment will facilitate dynamic updates to NIMA's information and will revolutionize and shorten traditional analytical and business processes. The modernized NSGI infrastructure will meet Operational Availability (A_o) Key Performance Parameters (KPP) of 99% (threshold) and 99.99% (objective).

3. Deploy a prototype environment where analysts and users/customers can "test-drive" new tools and work processes to improve efficiency and effectiveness in the workplace. This prototype environment will provide the capability to test new capabilities that will ultimately be delivered throughout NIMA.

4. Enable the achievement of the proposed future architecture by delivering a fully integrated, comprehensive, end-to-end NSGI system architecture that addresses both corporate and mission needs. The architecture will be mission driven, data centric, customer focused, highly reliable, agile, scalable, available, flexible, recoverable, and highly collaborative. This system architecture, based on open systems, will facilitate the rapid, continuous insertion of technology and support an evolutionary acquisition approach.

5. Provide Business Process Re-engineering (BPR) tools, facilitation, and change management to transform NIMA's corporate and mission processes, and guide the detailed planning and implementation of the architecture in support of NIMA's transformation.

6. Deliver a common, intuitive, efficient, reliable, and economical Geospatial Intelligence database populated through collaborative community processes. This database will allow for the easy and timely access to archived data to support analysis of complex Geospatial Intelligence problems and the production of standard and tailored products that can be easily queried. The goal is the capture, discovery and retrieval of Geospatial Intelligence data, information and knowledge, with a high level of assuredness by NIMA and its information partners at multiple levels of security.

7. Provide NIMA and its information partners an integrated, multi-intelligence (Multi-INT) and Geospatial Intelligence analytical environment. This integrated environment will support both Imagery Analysts (IA) and Geospatial Analysts (GA). This environment will use all available source data and contain a dynamic suite of technology-current tools to allow creative and innovative approaches to address immediate and long-term customer requirements covering the full spectrum of NIMA services. Production and dissemination of Geospatial Intelligence products and data will be an integral part of this integrated analytical environment.

8. Deliver a scalable and responsive capability to archive, retrieve and disseminate Geospatial Intelligence information across the NSGI at multiple security levels. This capability will ensure long-term assured storage and retrieval of Geospatial Intelligence in accordance with Continuity of Operations (COOP) practices and Business Continuity Planning expectations, contingency operations, records management and national archival storage mandates.

9. Deliver an integrated information management capability that will leverage commercial products and best business practices. This information management capability will provide on-line ordering, entry, and tracking of Geospatial Intelligence information as well as workflow management within the NSGI. Moreover, this information management capability will harvest commercial enterprise-level tools for supply-chain, customer-relationship, and enterprise-resource management and effectively build an efficient foundation for streamlined NSGI operations.

10. Perform system integration of legacy, heritage, and new, innovative capabilities needed to support mission requirements. Determine how each will be used within NSGI, and by whom. Verify interoperability and compatibility with the NSGI enterprise. In order to maximize Government investment, NSGI will leverage, as appropriate, existing capabilities from within the Intelligence Community (IC) and DoD, such as (but not limited to) the Joint Intelligence Virtual Architecture (JIVA), Intelligence Community System for Information Sharing (ICSIS), and the Global Information Grid (GIG).

11. Employ a System Integration Contractor (i.e., GeoScout) that is attuned to NIMA's customer-focused Business Model as detailed in the NETIPT Final Report. It is NIMA's goal to partner with the GeoScout contractor to deliver a robust and flexible architecture. This architecture will be capable of supporting NIMA's enterprise requirements and ever-evolving Geospatial Intelligence mission and will reliably and efficiently provide the data, information, knowledge and wisdom that our customers require.

2.0 APPLICABLE DOCUMENTS

2.1 COMPLIANCE DOCUMENTS

The following documents or their successor regulations, policies, or directives apply.

1. Department of Defense Chief Information Officer Guidance and Policy Memorandum No. 6-8510, "Department of Defense Global Information Grid Information Assurance", 16 Jun 2000
2. Deputy Secretary of Defense Memorandum, Subject: Information Assurance Vulnerability Alert (IAVA), 30 December 1992
3. DoD 5200.1R, "Information Security Policy Regulation", April 20, 1995
4. DoD Directive 5200.28, "Security Requirements for Automated Information Systems (AISs)", 21 March 1988
5. DoD Instruction 5215.2, "Computer Security Technical Vulnerability Reporting Program," 2 September 1996
6. DoD 5220.22-M, National Industrial Security Program Operating Manual (NISPOM); January 1995; (Change 2, May 1, 2000)
7. DoD 5105.21-M-1, Sensitive Compartmented Information Administrative Security Manual, Defense Intelligence Agency, August 1998
8. DoD 8510.1-M; Department of Defense Information Technology Security Certification and Accreditation Process (DITSCAP); Application Manual; 31 July 2000
9. DoD 5200.1R, "Information Security Policy Regulation", April 20, 1995
10. DoD Directive 4630.8, Compatibility, Integration, and Interoperability of Command, Control, Communications, Computers and Intelligence (C4I) Systems.
11. DoD Intelligence Information System (DoDIIS) Instruction 2000, February 2000.
12. DoD Manual 4120.24-M DoD Standardization Program (DSP) Policy and Procedures, March 2000
13. MIL-STD-1785, System Security Engineering Program Management Requirements
14. DIAM 50-4, Security of Compartmented Computer Operations (U), 24 June 1980
15. DoD Joint Technical Architecture (JTA), Version 4.0, 17 July 2002
16. OMB Circular A-130 "Management of Federal Information Resources" Revised (Transmittal Memorandum No. 4) 28 November 2000
17. Clinger-Cohen Act (Formerly Information Technology Management Reform Act (ITMRA) or PL.104-106)
18. Government Performance Results Act of 1993
19. Government Paperwork Elimination Act

20. Director of Central Intelligence Directive (DCID) 6/3, "Protecting Sensitive Compartmented Information Within Information Systems Manual", (DCID 6/3) - Manual, 03 May 2002, For Official Use Only
21. DCID 1/21, "Physical Security Standards for Sensitive Compartmented Information Facilities", 29 July 1994
22. AR 10-26, Information System Security, 08/27/97, For Official Use Only
23. AIS Security Program – AIS Security Plan (Template) – MSSA AIS 6/3 Compliant Security Plan – Version 1.5 Revised: 26 June 2000, For Official Use Only
24. WINDOWS 2000 Security Checklist, undated
25. "National Security Agency Security Recommendation Guides", http://nsa1.www.conxion.com/
26. National Imagery and Mapping Agency (NIMA) Windows 2000 Server Guidelines, 27 April 2000
27. NIMA W2k Member Server Local Policy Rev5, undated
28. IC CIO Information System Security Policy Series:
    a. IC CIO Intelligence Community Email Policy (U). 1 Jun 1999.
    b. IC CIO Intelligence Community Directory Services Policy (U). 5 Oct 1999.
29. NIMA information system security policies to include the following:
    a. NI 5220.1R1, Industrial Security, 1 November 2001
    b. NI 8010.2R1 Automated Information System Security (U), 26 Dec 2001
    c. NI 8010.3R3 Automated Information System Certification and Accreditation (U), 12 September 2002.
    d. NI 8010.4R2. Automated Information System Security Engineering (U), 19 Feb 2002
    e. NI 8010.11 NIMA-Controlled Computer Network Connectivity at Contractor and Other Facilities
    f. NI 8410.1R1 Implementation of Mobile Code (U), 26 Dec 2001
    g. NI 8420.3 Firewall Policy and Implementation (U), 5 July 2002
    h. NI 8400.1R1 Information Technology Purchases (U), 1 Nov 2001
30. DoD CIO Guidance and Policy Memorandum # 12-8430-July 26, 2000 "Acquiring Commercially Available Software"
31. DoD CIO Memorandum Public Key Infrastructure (PKI) Policy Update (U). 21 May 2002.
32. DoD CIO Memorandum Public Key Infrastructure (PKI) (U). 12 Aug 2000
33. DoD CIO Memorandum Public Key Enabling (PKE) of Applications, Web Servers, and Networks for the Department of Defense (DoD) (U). 17 May 2001
34. DoD CIO Memorandum Update to the Revised Defense Message System Transition Plan (U), 12 Apr 2001
35. NIMA Information Services Directorate O&S Transition Planning Guide (U), 11 Dec 2001
36. NIMA Memorandum, U-005-01/AM, Subject: Mandatory New Integrated Contract Performance Management Process for United States Imagery and Geospatial Services (USIGS) System Acquisitions, 19 October 2001

2.2 Reference Documents

1. Under Secretary of Defense for Acquisition, Technology, and Logistics Memorandum, Subject: Evolutionary Acquisition and Spiral Development, 12 April 2002
2. American National Standards Institute, EIA 748-98
3. CJCSI 6211.02A, Defense Information System Network and Connected Systems, 22 May 1996
4. CJCSI 3901.01A; Requirements for Geospatial Information and Services; 26 July 1999
5. DoD 5015.2-STD "Design Criteria Standard for Electronic Records Management Software Application", October 2001 (Draft)
6. DoD 8510.1 "DOD Information Technology Security Certification and Accreditation Process" (DITSCAP), July 2000
7. 36CFR, Chapter XII, National Archives and Records Administration (NARA), Subchapter B, "Records Management", 1 July 2002
8. OMB Memorandum 97-02, "Funding Information Systems Investments" (Raines Rules)
9. OMB Memorandum M-97-16, "Information Technology Architectures", 18 June 1997
10. OMB Circular A-94, "Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs," dated 10/29/92 (Revised 01/22/2002)
11. DoDI 7041.3, "Economic Analysis for Decision Making", 7 November 1995
12. DoD Directive 3020.26, "Continuity of Operations (COOP) Policy and Planning", 26 May 1995
13. Presidential Decision Directive #67, "Enduring Constitutional Government and Continuity of Government Operations", 21 October 1998
14. DoDI 3020.39, "Integrated Continuity Planning for Defense Intelligence", 3 August 2001
15. NIMA Services Demarcation Transition Plan, 30 August 2002
16. NIMA Corporate Transition Business Plan
17. Joint Vision 2020, June 2000
18. DoD Architecture Framework Version 1.0, October 2001, Draft
19. Report of the Defense Science Board Task Force on NIMA, April 2000
20. NIMA Commission Report, December 2000
21. NIMA Statement of Strategic Intent 2002
22. NIMA NETIPT Final Report, 26 August 2002
23. NIMA Standards Tiger Team Recommendations, 30 April 2002
24. NIMA Acquisition & Technology Directorate Program (AT) Plan, Part B USIGS Migration Plan (FY02-FY07), 28 September 2001
25. NIMA USIGS Draft ORD KPP Assessment Update, 16 July 2001
26. NSGI Operational Requirements Document (NORD) addressing NIMA's Programmatic Responsibilities to the National System for Geospatial Intelligence Core Capabilities, DRAFT, 15 June 2002
27. Capstone Requirements Document For the Imagery and Geospatial (IGCRD), 21 September 2000 (JROC Validated)

28. Operational Requirements Document (ORD) for the Future Imagery Architecture (FIA), JROCM-068-98, 11 June 1998
29. TPED Modernization Plan Update (MPU), June 2000
30. USIGS Enterprise Requirements Specification, Version B, 25 July 2000
31. NSGI Systems Training Management Plan, December 2001
32. Imagery and Geospatial Community (IGC) 2010 Concept of Operations (CONOPS), May 1999
33. NIMA Advanced Technology Program Plan, 27 March 2000
34. NIMA Commercial Imagery CONOPS, Version 2.0, 3 December 1999 (DRAFT)
35. Statement of Objectives (SOO) for the Future Imagery Architecture (FIA), 29 July 1998
36. Statement of Requirements (SOR) for the Future Imagery Architecture (FIA), 29 July 1998 (with amendments)
37. Systems Operations Concept (SOC) for the Future Imagery Architecture (FIA), 29 July 1998
38. Department of Defense, C4ISR Architecture Framework Version 2.0, 18 December 1997
39. Joint Chiefs of Staff, CJCSI 3170.01B, Requirements Generation System, January 2001
40. Joint Chiefs of Staff, CJCSI 3312.01, Joint Military Intelligence Requirements Certification, 23 February 2001, Draft
41. Joint Chiefs of Staff, CJCSI 6212.01B, Interoperability and Supportability of National Security Systems, and Information Technology Systems, 8 May 2000
42. Operational Requirements Document (ORD) for the Intelligence Community's Multi-Intelligence Acquisition Program (IC MAP), 6 November 2001, Revised on 25 March 2002 and approved by the ICCB on 3 April 2002
43. Concept of Operations for the Intelligence Community's Multi-Intelligence Acquisition Program (IC MAP), 22 April 2002, Version 1.0
44. National Imagery and Mapping Agency, National Reconnaissance Office, Imagery Acquisitions and Operations Directorate (NRO/IMINT) and Intelligence Community's Multi-Intelligence Acquisition Program (IC MAP) Joint Functional Interface Requirements (FIR), 12 August 2002, Version 1.0
45. Print Vision 2010, NIMA document, dated October 1998
46. Dissemination Vision, NIMA document, dated June 2000
47. NIMA Product Support Management Plan (PSMP), 21 March 2002
48. DoD Regulation 7000 14-R, Financial Management Regulations, Volumes 1-15, date varies by volume
49. Air Force Distributed Common Ground System ORD, 28 February 2001, Identification Code CAF 304-96-I
50. Common Imagery Ground/Surface System, Version 2.2, 19 July 2002

3.0 TECHNICAL REQUIREMENTS

3.1 GENERAL

The GeoScout contractor shall provide the products, services, resources and materials required to satisfy the Government's objectives, goals, and capabilities.

The GeoScout contractor, in partnership with the NIMA Program Office, the Enterprise Engineering contractor, the O&S contractors, and Legacy/Heritage system contractors, shall be responsible for system architecture development, system design, system development, system performance, procurement, system integration, implementation, testing, installation, delivery, and training of system capabilities for NIMA transformation.

The GeoScout contractor shall provide the IC with the NSGI capabilities that ensure increased performance for core mission requirements, reduced cycle times, and efficient data management.

Specific roles and responsibilities of the Enterprise Engineer, GeoScout, and O&S contractors are contained in Appendix C.

3.2 SYSTEM ARCHITECTURE

3.2.1 The GeoScout contractor shall update and maintain the description of the NSGI system view of the architecture developed as part of the NSGI Enterprise Architecture (NEA) Study contract (NEA Description, NEA Contract Data Requirements List (CDRL) 14). The goal is for the system view of the architecture description to be dynamically updated versus updated on a periodic cycle. The GeoScout contractor shall develop and maintain the system view of the architecture and related technical documentation, and provide access to the Government via the Integrated Data Environment (IDE) and Data Accession List (CDRL A001), as described in Section 4.1.

3.2.2 The GeoScout contractor shall use the system view of the architecture description to guide, manage, control, and monitor the physical implementations within each proposed block and spiral for NSGI modernization.

3.2.3 The GeoScout contractor shall evolve their system view of the architecture over time, consistent with the operational and technical views of the Enterprise Architecture, to include the conceptual data model.

3.2.4 The architecture shall be flexible, reliable, scalable, responsive, and "data-centric," and shall support mission and corporate requirements, to include contingency operations.

3.2.5 The architecture shall accommodate existing and new sensor types and Geospatial Intelligence data sources.

3.2.6 The architecture shall support an integrated Geospatial Intelligence analytical environment characterized by seamless access to data and information, integrated IA/GA tradecraft, and an

enterprise-wide information and workflow management capability. This environment shall provide collaborative, all-digital exploitation capabilities, where the user can access IA/GA and corporate applications and data from a single workstation, and implements refined business processes, practices, and rules.

3.2.7 The GeoScout contractor shall establish, execute, and maintain system engineering plans and processes consistent with the architecture.

3.2.8 The GeoScout contractor shall implement a Mission Assurance (MA) process and risk mitigation strategy for NIMA's people, processes, and technology. The GeoScout contractor shall deliver an architecture design that ensures the MA process can be implemented in sync with the GeoScout deliveries. This MA process includes, but is not limited to, the following elements:

a. Continuity of Operations (COOP)
b. Business Continuity Plan (BCP)
c. Computer Network Defense (CND)
d. Information Assurance (IA)
e. Critical Infrastructure Protection (CIP)
f. Information Technology/Disaster Recovery (IT/DR)

3.2.9 The GeoScout contractor shall develop and implement logical and physical data models at the system level consistent with the Enterprise Engineer's conceptual data model, and that satisfies mission requirements and all relevant standards. The GeoScout contractor shall develop and maintain the logical and physical data models and related technical documentation, and provide access to the Government via the Integrated Data Environment (IDE) and Data Accession List (CDRL A001), as described in Section 4.1.

3.2.10 The GeoScout contractor shall design and develop NSGI databases consistent with the Enterprise Architecture views, conceptual data model, transformation goals, and all relevant standards.

3.2.11 The NSGI system view of the architecture developed by the GeoScout contractor shall address multiple users at multiple levels of security.

3.2.12 The GeoScout contractor shall provide capabilities that ensure enhanced performance and responsiveness against core mission, reduced cycle times, and greater efficiencies.

3.3 INFRASTRUCTURE MODERNIZATION

3.3.1 The GeoScout contractor shall address infrastructure improvements as necessary throughout their block designs to support the implementation of their objective system view of the architecture. Taking into consideration the scope, intent, and on-going efforts of NIMA's ENGINE Program, the GeoScout contractor shall first define and deliver improved infrastructure capability as part of Block I. The improved capability shall support current NSGI acquisition

program execution, mission and corporate legacy/heritage mission operations, and the GeoScout contractor's system view of the architecture.

3.3.2 The GeoScout contractor shall be responsible for the design, development, and integration of upgrades to NIMA's ITI. The GeoScout contractor shall be responsible for the demonstration, testing, documentation, installation, and transition to operations of such upgrades. These upgrades shall address immediate and transitional infrastructure technical objectives that will become the foundation for subsequent NSGI transformation. These upgrades and integration of custom and Standards-based Commercial-Off-the-Shelf (SCOTS) Geospatial Intelligence systems will support the following thrust areas:

- Network Transport Layer Improvements. NIMA's transport layer will provide consistent Local Area Network (LAN) connectivity at all sites. This change will provide the flexibility for analysts to perform their mission in NIMA facilities or occupied space and allow any work area to be converted to a production area by replacing the workstation.

- Enterprise Management. The Enterprise Service Center (ESC) will provide redundant, responsive enterprise management through a consolidated help desk, technical support and enterprise monitoring capabilities.

- Information Access on the Web (Gateway). NIMA's Gateway (web-based dissemination system) will provide improvement to the user interface, discovery and retrieval capabilities, capacities, and product dissemination. The Gateway will provide tools and support applications needed to fully implement the Imagery Throughput Management program recommended by the NETIPT.

- Data Storage and Management. The data storage capability will optimize the use of modern data storage technologies and satisfy COOP, Business Continuity Plan expectations and contingency operations objectives.

- Workspace Improvements. NIMA's long-term objective is to more efficiently use facility spaces. A prototype for protected communications closets will be evaluated as the future standard for facility modifications, and will subsequently provide the basis for future facility modifications. Facility plans will assist NIMA to reach downward directed targets to reduce the total number of NIMA workstations.

- Computer Network Defense (CND). Security system engineering and integration will engineer up-to-date CND functionality on all networks and Automated Information Systems (AISs) in coordination with the NIMA CND Office.

3.3.3 The GeoScout contractor shall address infrastructure impacts for each capability within a block delivery. For example, if the contractor was to propose a "web portal," the design of such web portal shall include a description of the infrastructure impacts and subsequent implementation.

3.3.4 The GeoScout contractor shall recommend long haul and metropolitan area communications capabilities (i.e., inter-site) using only Government-furnished communications sources (e.g., DISN) or from authorized Government communications providers (e.g., Defense Information Systems Agency (DISA), National Security Agency (NSA), etc.). The Government must approve the use of any direct commercial-lease communications agreement or contract before the contractor enters into a subcontractor or vendor business relationship involving long haul or metropolitan area communications.

3.4 BLOCK DESIGN AND IMPLEMENTATION

3.4.1 As stated in Paragraph 1.2, NIMA has embraced an evolutionary acquisition approach that delivers "blocks" of operational capabilities using a spiral development process.

3.4.2 The GeoScout contractor, in coordination with the NIMA Program Office, the Enterprise Engineer, and the O&S contractors, shall define, design, develop, and deliver blocks of operational capability that incrementally move NIMA and the NSGI toward realization of the objective Enterprise Architecture. The GeoScout contractor's overall approach shall be documented in the NSGI System Transition Plan (CDRL A002). The GeoScout contractor shall refine and maintain the overall Life Cycle Cost Estimate (CDRL A003) that is consistent with the NSGI System Transition Plan. For each block, the GeoScout contractor shall develop a Business Case (CDRL A004) and Implementation Plan (CDRL A005). The GeoScout contractor shall iteratively update and maintain the NSGI System Transition Plan, the Life Cycle Cost Estimate, and the block level Business Case and Implementation Plans. (CDRL A002, CDRL A003, CDRL A004, CDRL A005)

3.4.3 The Enterprise Architecture drives the content of each evolutionary block. The blocks, in turn, drive the content of the spirals within it. Both blocks and spirals may be of varying length, and may overlap (i.e., blocks may overlap other blocks, and spirals may overlap other spirals). Notionally, blocks may range from a few months to a few years, and spirals may range from three to 18 months. The near term blocks will have more detail than subsequent blocks.

3.4.4 The GeoScout contractor shall incrementally update and maintain the NSGI System Transition Plan and the Life Cycle Cost Estimate. The NSGI System Transition Plan shall address all aspects of NIMA's transformation from the current as-is system view of the architecture to the to-be system view of the architecture, including Future Imagery Architecture (FIA) systems and segments. The NSGI System Transition Plan shall address the migration of functionality over time such that users experience minimal disruption and no loss of required functionality. The Life Cycle Cost Estimate shall address the total cost of ownership over time (see Section 4.4).

3.4.4.1 As each block is defined, the GeoScout contractor shall incrementally incorporate changes to the NSGI System Transition Plan and the Life Cycle Cost Estimate. Updated versions of the NSGI System Transition Plan and the Life Cycle Cost Estimate shall be submitted, along with the block Business Case and the block Implementation Plan, for Government approval. The GeoScout contractor shall start with the corresponding deliverables from the NSGI Enterprise Architecture (NEA) Study (i.e., the NEA Transition Plan, NEA CDRL

20 and NEA Life Cycle Cost Estimate, NEA CDRL 17). Within 90 days of contract award, the GeoScout contractor shall provide to the Government the initial update of the NSGI System Transition Plan and Life Cycle Cost Estimate reconciled to the Block I Task Order issued by the Government. (CDRL A002, CDRL A003)

3.4.5 The NSGI System Transition Plan shall be consistent with the Government's prioritized corporate and mission needs and block priority sequencing as provided in Appendix D, and with the system integration and program management responsibilities contained in Statement of Work (SOW) Sections 3 and 4. The GeoScout contractor shall translate the Government's prioritized corporate and mission needs into delivered capabilities. The GeoScout contractor will be allowed to recommend alternate priorities for delivery of capabilities appropriate to their system view of architecture, within the constraints of cost, schedule, technical feasibility and other factors. The GeoScout contractor shall recommend the best enterprise solution appropriate to their system view of the architecture. The GeoScout contractor shall include specific documentation in the NSGI System Transition Plan that supports completeness, soundness of approach, innovation, creativity, use of best commercial practices, business case, and cost-performance efficiencies. The GeoScout contractor shall provide traceability of the system view and delivered capabilities to the Government's prioritized corporate and mission needs. (CDRL A002)

3.4.6 NIMA management will use the GeoScout contractor's Business Case, Life Cycle Cost Estimate, and NSGI System Transition Plan to support its Program Objective Memorandum (POM) and budget formulation processes. The quality, timeliness, and effectiveness of the analysis, risk mitigation, and detailed planning provided by the GeoScout contractor will be significant factors in determining the amount and timing of resources available for the GeoScout program. (CDRL A002, CDRL A003, CDRL A005)

3.4.6.1 The GeoScout contractor shall provide a comprehensive Business Case for each subsequent block detailing the cost and benefits, or value, of that proposed block. (CDRL A004) The block level Business Case shall include:

- A performance-based, risk-adjusted analysis of benefits and costs for the proposed block capability.
- The foundation for comparing the baseline benefits and costs with the proposed block and a basis for decision-makers to select a feasible option that meets performance objectives.
- A cost benefit analysis showing how the proposed block capability contributes to the overall achievement of the Enterprise Architecture, the NSGI Operational Requirements Document (NORD) KPPs, proposed new and relevant block thresholds and objectives. The cost benefit analysis shall also include the rationale for how the Enterprise Architecture evolves.
- BPR activities necessary to fulfill the business case, with organizational impacts and proposed change plans
- Cost analysis trades showing the break-points for bulk commodity acquisitions and incorporation of IC and DoD initiatives, such as (but not limited to) the JIVA, ICSIS, and GIG capabilities

- Projection of the life cycle costs for the proposed block of capability.

3.4.6.2 The GeoScout contractor shall develop comprehensive "alternate use" business cases for legacy and heritage programs. Where business cases warrant, and after Government approval, the GeoScout contractor shall initiate system modernization implementation efforts and provide new mission capabilities to replace legacy and heritage capabilities. These efforts shall be consistent with the Enterprise Architecture, the NIMA Master Schedule, and minimize interruption to mission operations.

3.4.6.3 The GeoScout contractor shall assist the Government to develop and defend the business case information. The GeoScout contractor shall assist the Government in defending this information when presented to NIMA's external oversight and Congressional Staff to secure approval and funding for new requirements and capabilities.

3.4.7 The Implementation Plan shall include, at a minimum, a description of the changes and/or additions to capabilities; business processes and architecture introduced by the block; related infrastructure requirements; designs, and plans; recommended objective and threshold performance parameters; the schedule; and a staffing profile for Customer, Operator, and Maintainer personnel resources required to use, operate, and maintain new capabilities, processes, and systems. The block shall be described in terms of the spirals contained within it. (CDRL A005)

3.4.8 The GeoScout contractor shall have its preliminary Business Case and Implementation Plan for subsequent blocks available to the Government for review 90 days prior to the beginning of each block so that the Government can be assured that there will be a seamless transition between the blocks. The final block Business Case and Implementation Plan shall be due to the Government 30 days prior to the start of each block. (CDRL A004, CDRL A005)

3.4.9 The Government will review and approve all GeoScout contractors' Business Cases and Implementation Plans and issue Task Orders to proceed.

3.4.10 The GeoScout contractor shall be responsible for the development, technology insertion, integration, testing, and delivery of NSGI systems and associated technical data consistent with their system view of the architecture, the approved NSGI System Transition Plan and the approved Implementation Plan. The GeoScout contractor shall deliver the system and associated technical data as provided in the approved Implementation Plan. (CDRL A005)

3.4.11 All block definitions shall be defined in accordance with the Under Secretary of Defense for Acquisition, Technology, and Logistics Memorandum, dated 12 April 2002, Appendix A.

3.4.12 The GeoScout contractor shall satisfy the thresholds and objectives established for each defined block capability.

3.5 System Integration

3.5.1 The GeoScout contractor shall perform as the NSGI System Integrator (SI), including program management, integration planning, requirements analysis, solution synthesis, design, implementation, procurement, acquisition, testing, and delivery of modernized NSGI capabilities. The SI responsibilities shall include this full range of responsibilities for newly developed mission and corporate systems. For existing NSGI capabilities, the GeoScout Contractor shall have responsibility for integrating system changes developed and delivered under NIMA's current legacy and heritage contracts as performed under the current NSES contract; this shall continue until the existing legacy and heritage contracts are concluded. Current NSES contract SI responsibilities include system requirements analysis, interface analysis and control, segment design and development oversight and evaluation, integration, and test and transition support. The GeoScout contractor's plan for performing NSES SI functions must include transition during the period from GeoScout Contract award to the end of the NSES Contract on 30 September 2003, and continued execution post 30 September 2003.

3.5.2 The GeoScout contractor shall implement capabilities to satisfy the modernization and transformation of NIMA as defined by the 10 precepts of the NETIPT Final Report. The GeoScout contractor shall develop, integrate, test and field fully integrated, mission effective, cost effective, "best value" solutions to meet customer operational mission requirements. These solutions must also be consistent with the Contract Master Schedule, Corporate Transformation Business Plan, the NIMA Statement of Strategic Intent, and DoD and IC oversight guidance.

3.5.3 The GeoScout contractor shall integrate all necessary heritage and legacy data and information into the architecture, to include data migration and related processes such as digitization of hardcopy sources and archives. The GeoScout contractor shall include current and evolving systems, such as FIA, airborne, and commercial sources.

3.5.4 The GeoScout contractor shall integrate and test systems developed by other development contractors, including those identified by the Government, to ensure that the delivered systems are consistent with the proposed system view of the architecture.

3.5.5 The GeoScout contractor shall define, develop, and implement a system requirements process that seamlessly interfaces with the Enterprise Engineer's requirements management process.

3.5.6 The GeoScout contractor shall derive and allocate system requirements (defined by the Enterprise Engineer) to the architecture components defined in the system view of the architecture.

3.5.7 The GeoScout contractor shall incorporate existing and planned Government capabilities, such as (but not limited to) JIVA, ICSIS, GIG and other similar investment initiatives, where such programs can satisfy mission and corporate needs at lower cost, improved schedule, or reduced risk consistent with the Business Case.

3.6 Relationships With The Government and Other Contractors

3.6.1 The GeoScout contractor shall, within 45 days of the Enterprise Engineer Contract award, provide to the Government, for approval, an updated set of plans and processes for interfacing with the Enterprise Engineer. (CDRL A006)

3.6.2 The GeoScout contractor shall assume that all current NIMA plans and processes remain in effect until such time as the Enterprise Engineer Contract is awarded and the Government has approved re-designed enterprise plans and processes. If circumstances warrant, the Government may approve the re-design of processes and their implementation prior to Enterprise Engineering contract award.

3.6.3 The GeoScout contractor shall, within 45 days of contract award, provide to the Government, for approval, an updated set of plans and processes for interfacing with the existing O&S contractors. (CDRL A006)

3.6.4 The GeoScout contractor shall, within 90 days of contract award provide to the Government, for approval, an updated set of plans and processes for interfacing with the FIA Joint Management Office (FIA JMO). (CDRL A006)

3.6.5 The GeoScout contractor shall manage, when approved by the Government, an orderly transition from the existing NSES contract for NSGI segments to the GeoScout contract without impact to NIMA mission operations and established NIMA Master Schedule capability delivery dates. The plan for transitioning from NSES to GeoScout shall include Segment/Project Integration, International Office Support, and engineering and system integration support to the Military Combatant Commands.
(CDRL A006)

3.6.6 The GeoScout contractor shall develop a strategy with the legacy and heritage systems contractors, and with Government approval, to expeditiously implement migration and integration of legacy and heritage capabilities into the modernized NSGI system with minimal interruption to current mission operations. (CDRL A006)

3.6.7 The GeoScout contractor shall base these contractor-interaction plans and processes on the roles and responsibilities defined in Appendix C. The GeoScout contractor, in cooperation with the Enterprise Engineer and O&S contractors, shall identify potential conflict areas, and develop and implement a mitigation strategy to preclude mission-impacting, cross-contract, and inter-contract conflicts. Where changes to the roles and responsibilities are mutually agreed-to by the relevant contractors, these changes shall be provided to the Government for approval 60 days prior to the proposed effective date of the change. (CDRL A006)

3.7 Corporate And Mission Business Process Re-Engineering Implementation

3.7.1 The GeoScout contractor shall develop and implement the Government-approved Business Process Re-engineering (BPR) Plan for both corporate and mission processes. (CDRL A007)

3.7.2 The GeoScout contractor shall, in coordination with the Enterprise Engineer and O&S contractors, work with NSGI customers and users to identify, recommend, and establish new business processes/practices to take advantage of new technology and more efficient and effective ways of doing business. The GeoScout contractor BPR approach shall address the need to gain customer and end-user buy-in to new business processes, practices, and technologies through change management.

3.7.3 The GeoScout contractor shall incorporate approved results of BPR into Block Implementation Plans including, as necessary, new tools, training (customer, operator and maintainer), definition of new roles and new documentation through an established change management process. Each Block Implementation Plan and the NSGI System Transition Plan shall clearly identify and describe relevant BPR implementation activities for that block/spiral. (CDRL A002, CDRL A005)

3.7.4 The GeoScout contractor shall document, new business processes/rules and best commercial practices needed by NIMA to successfully execute and implement the proposed transformation of NIMA and the Enterprise Architecture. Such documentation shall be incorporated into the Block Implementation Plan during the block implementation.

3.7.5 The GeoScout contractor shall propose, perform, and implement BPR at the system level consistent with the scope of their proposed system view of the architecture.

3.8 TECHNOLOGY INSERTION AND NIMA PRE-PRODUCTION ENVIRONMENT (NPE)

3.8.1 The GeoScout contractor shall establish and manage an NPE to provide a systematic, proactive approach to identifying, developing, testing, and inserting commercial, academic and government technologies into the NSGI system view of the architecture. The NPE elements shall be located in the production environment, but will be initially decoupled from the NIMA-owned operational network. Decoupled means that the NPE elements will not be connected to mission critical operational networks in such a way that may cause the NPE elements to interfere with real-world mission satisfaction. The use of live feeds and direct, non-air gapped interfaces (input or output) is situation-dependent based on the scope of each NPE initiative and the associated security and technical risk assessment. Each NPE initiative shall be subject to the certification and accreditation process that will adjudicate the Approval to Operate (ATO) appropriate to the situation.

3.8.2 The GeoScout contractor shall assess technology insertion opportunities and develop supporting business cases. Where business cases warrant, and after Government approval, the GeoScout contractor shall develop plans and processes to insert new technology from many sources, including the Geospatial Intelligence Advancement Testbed (GIAT), into the NPE.

3.8.3 The GeoScout contractor shall continuously integrate successful NPE technology insertion capabilities into the NSGI upon Government approval.

3.8.4 The NPE shall, at a minimum, support a one-shift production operation, with the ability to surge to a 24-hours a day, seven days a week production operation. The GeoScout contractor shall minimize impact to mission-critical production operations.

3.8.5 The GeoScout contractor shall deliver an operational version of their Thin-Line Operational System (TLOS), fully ready for security certification and accreditation, as the first instantiation of the NPE within 90 days of contract award.

3.8.6 The GeoScout contractor shall perform technology and standards forecasting in support of enterprise architecture planning activities.

3.8.7 The GeoScout contractor shall address, as part of BPR activities, the interfaces, relationships, and potential to consolidate GIAT, NPE, and Integrated Test Facility (ITF) functions and responsibilities.

3.9 Modeling and Simulation

3.9.1 The GeoScout contractor shall use modeling and simulation methods and tools to design the system view of the architecture and verify that it can meet system requirements. The GeoScout contractor shall validate the modeling and simulation assumptions and parametrics, to include inputs, parameters, and sources, with Government Subject Matter Experts (SMEs) on a recurring basis.

3.9.2 The GeoScout contractor shall develop and implement a modeling and simulation process and methodology to support development of the system view of the architecture.

3.9.3 The GeoScout contractor shall coordinate the scope and the results of all modeling and simulation development activities with the Enterprise Engineering contractor and the O&S contractors.

3.9.4 The GeoScout contractor shall propose and implement performance management modeling and simulation strategies to support predictive analysis of the system view of the architecture under operational load.

3.9.5 The GeoScout contractor shall leverage lessons learned with regard to leading-edge modeling and simulation technologies and capabilities to support modeling and simulation process improvements and technology insertion.

3.10 System Support

The GeoScout contractor shall maintain the NSGI system hardware and software development baseline. The GeoScout contractor shall provide updates and changes to the NSGI operational hardware and software baseline via the NSGI system Configuration Management (CM) process. The O&S contractor installs operational baseline updates.

4.0 PROGRAM MANAGEMENT REQUIREMENTS

4.1 PROGRAM MANAGEMENT

4.1.1 The GeoScout contractor shall develop, maintain, and implement a Program Management Plan (PMP). The PMP shall describe the technical approach, organizational resources and management controls that the contractor shall employ to meet the cost, performance and schedule requirements throughout the contract period of performance. The GeoScout contractor shall develop and maintain the PMP, and provide access to the Government via the Integrated Data Environment (IDE) and Data Accession List (CDRL A001), as described in Section 4.1.

4.1.2 The GeoScout contractor shall manage the GeoScout program in accordance with their PMP, which shall be in conformance with DoD and industry best business practices. The GeoScout PMP will allow the Government insight into the program.

4.1.3 The GeoScout contractor shall manage the GeoScout Program using processes and best practices consistent with a Capability Maturity Model Integration® (CMMI®) (or equivalent process maturity model) Level 3 (or higher).

4.1.4 The GeoScout contractor shall develop a sub-contractor management plan in the PMP that is in conformance with current DoD/Industry best practices. This plan shall clearly illustrate how the GeoScout contractor will seamlessly integrate subcontractor/teammates into the GeoScout Program.

4.1.5 The GeoScout contractor shall describe in the PMP their support to the NIMA Program Manager in the development, implementation, operations and maintenance of the NSGI.

4.1.6 The GeoScout contractor shall employ and maintain the PMP to ensure flexibility to respond to the demands of the contract as workloads and activities change over time to reflect the dynamic and evolutionary nature of the Enterprise Architecture.

4.1.7 The GeoScout contractor shall provide program management for new capabilities that replace legacy and heritage systems as proposed in the NSGI System Transition Plan and with Government direction or approval.

4.1.8 The GeoScout contractor shall establish a data management system and appropriate digital environment to allow every authorized activity involved with the program to cost-effectively create, store, access, manipulate, and/or exchange data electronically. The Integrated Digital Environment (IDE) shall, at a minimum, meet the data management needs of the support strategy, system engineering process, modeling and simulation activities, Test & Evaluation (T&E) strategy, and periodic reporting requirements. The design shall allow ready access to the IDE to anyone with:

- Need-to-know (as determined by the Government);
- Technologically "current" personal computer; and
- Internet access through a Commercial-Off-the-Shelf (COTS) browser.

4.1.9 The GeoScout contractor shall include specific proposals for an IDE solution in the PMP to support acquisition and operational support activities. The GeoScout contractor shall provide on-line access to programmatic and technical data in accordance with security policies and standards that protects classified and restricted data against potential compromise. The GeoScout contractor shall give preference to on-line access (versus data exchange) through a commercial information service or existing IT infrastructure. The GeoScout contractor shall identify the required functionality and data standards. The data formats of independent national and international standards-setting organizations shall take precedence over all other formats. The issue of data formats and transaction sets shall be independent of the method of access or delivery.

4.1.10 The GeoScout contractor shall develop and implement the IDE solution that best meets their preferred business model. Consequently, the Government Program Office will take maximum advantage of and have minimum impact on the GeoScout contractor's solutions.

4.1.11 The GeoScout contractor shall, at appropriate decision points and program reviews, address the status and effectiveness of the IDE.

4.1.12 The GeoScout contractor shall provide a phased plan to meet NIMA's Electronic Records Management requirement to store all digital data until such time the data is declassified and transferred to National Archives and Records Administration (NARA). The GeoScout Contractor shall:

- Ninety (90) days from contract award, provide a plan to the Government for the digital storage of all National Technical Means (NTM) imagery
- 120 days from contract award, provide a plan to the Government for the digital storage of all commercial imagery and NIMA heritage and legacy products
- One (1) year from contract award, provide a plan to the Government for the digital storage of all Geospatial Intelligence data

4.1.13 The GeoScout contractor shall maintain an up-to-date Data Accession List (CDRL A001) of all technical and programmatic data generated and maintained by the GeoScout contractor team (prime and subcontractors), which is not otherwise included in another CDRL. The GeoScout contractor shall allow the Government access to the Data Accession List and furnish, on request, electronic access to any item contained in this list as Not Separately Priced (NSP) data. (CDRL A001)

4.1.14 The GeoScout contractor shall provide management control across the scope of the contract. Technical and contract management control shall, for the effective and efficient accomplishment of all requirements contained in this contract, include as a minimum:

System Integration	Configuration Management
System Engineering Management	Data Management
System Engineering	Documentation Management
Software Engineering	Progress/status reporting
Hardware Engineering	Management Reviews

Program Support Management	Test and Evaluation Management
Sub-Contractor Management	Earned Value Management
Quality Assurance	Integrated Digital Environment
Integrated Systems Training	Integrated Schedule Management

4.2 CONTRACT WORK BREAKDOWN STRUCTURE (CWBS) AND DICTIONARY

4.2.1 The GeoScout contractor shall use and maintain the product-oriented Contract Work Breakdown Structure (CWBS) contained in Appendix E. The CWBS shall be the framework and guide for developing and implementing new mission capabilities based on an increment/block, spiral-based capability development and delivery methodology. The CWBS shall be the integrating mechanism for linking GeoScout contractor schedule management and Earned Value Management (EVM) processes. Recommended changes to the CWBS provided in Appendix E shall be provided to the Government for review and approval prior to implementation. (CDRL A008)

4.2.2 The GeoScout contractor shall develop and maintain a CWBS Dictionary (CDRL A008). The CWBS Dictionary shall describe the scope of work and entry and exit criteria for all CWBS elements. The GeoScout contractor shall update and deliver new CWBS and CWBS Dictionary versions to the Government as needed following any changes to the contract.

4.3 PROGRAM PLANNING, CONTROL, AND REPORTING

4.3.1 INTEGRATED CONTRACT PERFORMANCE MANAGEMENT (ICPM)

The GeoScout contractor shall implement an ICPM process consistent with NIMA's ICPM Process Guidelines (See Section 2.1)

4.3.1.1 SCHEDULE MANAGEMENT

The GeoScout contractor shall develop and implement a robust schedule management process consistent with industry best practices for systems development. The GeoScout contractor shall develop an integrated Contract Master Schedule (CMS). The CMS shall be vertically and horizontally traceable for major, integrated product deliveries across the NSGI. All dependencies shall be clearly identifiable in the CMS. The CMS shall address all work required for successful completion of GeoScout contract tasks. The CMS shall include a Predecessor-Successor List that identifies internal and external systems development and implementation dependencies. The CMS shall include a Milestone Status Report. (CDRL A009)

4.3.1.2 Earned Value Management

The GeoScout contractor shall implement an Earned Value Management System (EVMS) consistent with American National Standards Institute (ANSI) 748, Industry Guidelines for Earned Value Management, and an increment/block-based spiral-development acquisition methodology. The EVMS shall serve both the contractor's internal management requirements and the government requirements for integrated cost and schedule visibility and management

control. The GeoScout contractor shall develop and maintain the Cost Performance Report (CPR) (CDRL A010). The CPR shall be submitted monthly and tie to the CWBS (CDRL A008). Integrated Baseline Reviews (IBRs) are an integral, on-going part of any best practice EVMS implementation. As such, an initial IBR will be conducted as soon as practical after contract award as mutually agreed to by the GeoScout contractor and the Government. IBRs will also be conducted on an on-going basis throughout the contract life.

4.3.1.3 Metrics Management and Reporting Requirements

The GeoScout contractor shall propose, generate, maintain, analyze, and report on the performance metrics used to assess technical progress on the GeoScout Program. The GeoScout contractor shall propose a Metrics Management Plan (CDRL A011), which will specify appropriate functional performance satisfaction, technical software development, and maintenance metrics that will be used to manage the GeoScout Program. The Metrics Management Plan shall include metrics that the GeoScout contractor normally tracks and which are considered significant indicators of technical progress. The Government will approve the Metrics Management Plan prior to implementation. The GeoScout contractor shall manage and maintain the performance metrics in conformance to the approved metrics plan, and provide access to the Government via the Integrated Data Environment (IDE) and Data Accession List (CDRL A001), as described in Section 4.1.

4.3.2 Financial Management and Control

The GeoScout contractor shall develop a monthly Contract Funds Status Report (CFSR). (CDRL A012) The CFSR shall provide time-phased contract funds requirements of the GeoScout contractor, mapped to the CWBS (CDRL A008), and will be used by the Government in support of planning and decision-making.

4.3.3 Cost as an Independent Variable (CAIV)

Cost as an Independent Variable (CAIV) shall be employed by the GeoScout contractor to evaluate time-phased KPPs versus cost objectives. The GeoScout contractor shall recommend to the Government trade-offs between the objective and threshold values for each KPP.

4.4 Life Cycle Cost (LCC) Analysis, and Control

4.4.1 The GeoScout contractor shall develop life cycle cost estimates for all proposed, developed and delivered capabilities.

4.4.2 The GeoScout contractor shall refine and maintain the Life Cycle Cost Estimate (LCCE) (CDRL A003) developed as part of the NEA study (NEA CDRL 17). The LCCE shall be consistent with the system view of the architecture (as outlined in Section 3.2.1), NSGI System Transition Plan (CDRL A002) and risk reduction activities. The LCCE shall be iteratively updated based on the Business Case for each block of capability (CDRL A004). These cost estimates shall provide total cost of ownership, (including research and development,

procurement, operations and sustainment, re-capitalization, and decommissioning and disposal costs) by government fiscal year. The life cycle cost estimate shall reflect the following attributes:

- Realism – the compatibility of proposed costs with scope and effort
- Reasonableness – the Contractor's methodology used in developing cost estimates
- Affordability – proposed cost is within anticipated budget actions
- Completeness – responsiveness in providing cost data for all requirements and items in the SOW

4.4.3 The LCCE shall employ a program WBS and WBS Dictionary that goes down to the lowest level necessary to adequately estimate system costs for the specified time frame. The program WBS shall be relatable to the CWBS referenced in SOW Section 4.2 and Appendix E (CDRL A008). The LCCE shall include a sensitivity analysis, which identifies program cost drivers. The LCCE shall also include cost risk analyses detailing probability and confidence levels for costs generated by the model.

4.5 Management Reviews

4.5.1 The GeoScout contractor shall plan and schedule formal technical and programmatic reviews that will reveal to the Government their progress during planning, design, implementation, test, training and delivery activities. These reviews shall be defined and identified in the Contractor PMP and the CMS, respectively. Either the Government or the GeoScout contractor may convene ad hoc reviews should circumstances make them necessary.

4.5.2 The GeoScout contractor shall focus each review on the achievements since the last review, conduct and success of risk management activities, unresolved issues, action items and problems. These review items will be measured against the Government's objectives, goals and schedule developed elsewhere in this contract.

4.5.3 The GeoScout contractor shall develop, document, and distribute the agenda and record and distribute review proceedings, to include action item tracking and resolution.

4.6 Quality Assurance Program

4.6.1 The GeoScout contractor shall develop, document, implement, and maintain a quality program to assure quality of contract deliverables, management of development processes, and interface with the Enterprise Engineering contractor on quality assurance matters.

4.6.2 The GeoScout contractor shall report all quality discrepancies to the NIMA Program Office and these discrepancies shall be included in any reporting requirements established by the Government.

4.7 CONFIGURATION MANAGEMENT (CM) PROGRAM

4.7.1 The GeoScout contractor shall develop, implement, and maintain a system (CM) process consistent with the NIMA Enterprise Configuration Management process and industry best practices.

4.7.2 The GeoScout contractor shall maintain CM control of the development software and hardware baselines developed under this contract.

4.7.3 The GeoScout contractor shall maintain in softcopy, using appropriate tools and databases/repositories, all technical and programmatic documentation; repository-based models and artifacts (e.g., system view of the architecture representations such as UML models); logical and physical data-models; and other data developed as part of this contract. All documentation, databases, and repository-based models shall be available in softcopy to the Government, and delivered to the Government at the end of contract or as requested. All tools, databases, and repositories used to maintain technical and programmatic documentation as well as repository-based models under this contract shall be interoperable with those used by NIMA, the Enterprise Engineering contractor, and the O&S contractor. Where necessary, the GeoScout contractor shall provide the Government with project-specific tools and any project-specific tailoring of the tools. All documentation shall be readable using standard COTS office automation products.

4.8 RISK MANAGEMENT PROGRAM

4.8.1 The GeoScout contractor shall develop and implement an integrated Risk Management process consistent with best industry practices.

4.8.2 The GeoScout contractor shall interface with the Enterprise Engineer and O&S contractors on enterprise-level risk issues/matters.

4.9 INTEGRATED LOGISTICS SUPPORT

4.9.1 The GeoScout contractor shall develop, maintain, and implement a Product Support Management Plan (PSMP) (CDRL A013).

4.9.2 The PSMP shall include, in detail, a coordinated approach to hardware and software maintenance, sparing, licenses for COTS products, and training of customer, operator and maintainer personnel. NIMA currently employs separate Operations and Sustainment (O&S) Contractors, and the GeoScout PSMP shall address the responsibility of O&S Contractors. This plan shall include a detailed approach for transitioning newly developed systems to the operational baseline managed by the O&S contractor.

4.9.3 The PSMP shall indicate how the GeoScout contractors will provide support to sites, including domestic, foreign and forward-deployed sites. Note that some potential design approaches may be web-based and may not require physical items to be fielded at remote locations. Since capabilities installed at operational sites involve access to classified information, the PSMP shall also indicate how the GeoScout contractor will provide sufficient cleared personnel to accomplish maintenance tasks.

4.9.4 The PSMP shall be augmented by other contractor-developed plans addressing specific support requirements. For example, training performed by the National Geospatial Intelligence College and by Service training organizations, may be documented in separate training plans.

4.9.5 Before capabilities transition to operational environments, the GeoScout contractor shall perform overall system configuration management, complete transition activities and documentation including the update and distribution of system changes and the maintenance of site-specific installation variations. The GeoScout contractor shall provide engineering support during the transition to operational environments to assist in seamless transition of capabilities, and to minimize impact to mission-critical production operations.

4.10 Test And Evaluation Management

4.10.1 The GeoScout contractor shall implement a flexible system test capability that does not require the operational NSGI to be used for new development and modernization testing.

4.10.2 The GeoScout contractor shall demonstrate, test, and assist in the validation of each proposed upgrade and/or enterprise integration. The GeoScout contractor shall also evaluate and document the results of all GeoScout testing activities.

4.10.3 All tests shall be conducted in accordance with a System Development Test Plan (SDTP) (CDRL A014) developed by the GeoScout contractor and approved by the Government. The SDTP shall be consistent with the Enterprise Test and Evaluation Master Plan (TEMP) developed by the Enterprise Engineer.

4.10.4 Beta 1 and Beta 2 tests shall be conducted at NIMA's Integrated Test Facility (ITF), Joint Interoperability Test Command, and/or at user sites/facilities to be identified through mutual agreement by the GeoScout contractor and the Government. Locations will be documented in the System Development Test Plan(s) (CDRL A014) and the TEMP maintained by the Enterprise Engineer.

4.10.5 The Government reserves the right to conduct independent verification and validation (IV&V) on any system and its associated hardware and software.

4.10.6 The GeoScout contractor shall be responsible for Beta 2 testing at operational sites.

4.10.7 The GeoScout contractor shall support the Enterprise Engineer during Beta 1 testing at the ITF and/or at user sites/facilities.

4.10.8 The GeoScout contractor shall be responsible for system/software certification activities to include DoDIIS certification, Interoperability certification, and security certification/accreditation.

4.10.9 The testing, planning and execution for each upgrade or integration shall include Security Certification and Accreditation testing in accordance with NI 8010.3R3. The security test

procedures and test reports shall be included as appendices in the System Security Authorization Agreement (SSAA) (CDRL A018).

4.11 Training Support

4.11.1 The GeoScout contractor shall develop and maintain training materials and training devices for all capabilities delivered under this GeoScout contract in accordance with Training and Doctrine standards and policies for training materials and coursework. This encompasses actions, procedures and techniques to establish/maintain life cycle Training and Training Device Programs. The GeoScout contractor shall develop and maintain the Training Plan and Materials (CDRL A015) in accordance with the Operator, Maintainer, and Customer staffing profile in the approved block Implementation Plan (CDRL A005).

4.11.2 The GeoScout contractor shall provide training/training engineering expertise for NSGI systems in coordination with the NIMA Training and Doctrine Directorate and the NGC. The GeoScout contractor shall coordinate and interface with industry, customers, stakeholders and other support activities involved in planning and implementing training programs. (CDRL A015)

4.12 Facility Clearance

The GeoScout contractor shall ensure all facilities utilized in support of the contract are cleared for the level of security required to perform the work under this contract and in accordance with the Government's industrial security program and DOD 5220.22-M; National Industrial Security Program Operating Manual (NISPOM), January 1995 (Change 2, May, 2000); and DCID 1/21, "Physical Security Standards for Sensitive Compartmented Information Facilities," as appropriate.

4.13 Standardization

The GeoScout contractor shall comply with the DoD Manual 4120.24-M Defense Standardization Program (DSP) Policy and Procedures of March 2000 or its successors and guidance from the National Center for Geospatial Intelligence Standards. The GeoScout contractor shall adhere to the DoD DSP policy that promotes open, interoperable commercial standardization of materiel, facilities, and engineering practices to improve military operational readiness, reduce total ownership costs, and reduce acquisition cycle time.

4.14 Security Engineering

4.14.1 Program Protection Plan

4.14.1.1 DoD Regulation 5000.1-R requires that sensitive information and technologies be identified early in the acquisition process and be protected from inadvertent or unauthorized disclosure. One of the options available to meet this requirement is to develop a Program Protection Plan (PPP). Its purpose is to protect defense items and technical data from hostile collection efforts and unauthorized disclosure during the acquisition process.

4.14.1.2 The GeoScout contractor shall produce a PPP (CDRL A016) that addresses the protection of Critical Program Information (CPI) throughout the acquisition cycle. The PPP must consider system vulnerabilities, specific threats, and which countermeasures to employ to protect the assets.

4.14.1.3 The scope of the PPP is dictated by which CPI needs protection, the threat and vulnerabilities, and the system security engineering necessary for life-cycle protection. This serves as the basis for information security-related decisions in drafting the Security Classification Guide (SCG). DoD 5200.1-R requires a SCG for all classified systems, programs, plans, or projects. The GeoScout contractor shall develop the SGC (CDRL A017). The SCG should include appropriate controls for sensitive (controlled) unclassified information and classified information, and time-phase the security guidance over the life of the item.

4.14.1.4 The PPP shall also include the System Security Management Plan as an annex. This annex concentrates on the protection of the system in its operational environment. The System Security Management Plan draws upon a portion of system security engineering as described in MIL-STD-1785. System security addresses the use of engineering measures to protect the system physically, or to limit actions, which compromise its war-fighting or support capabilities.

4.14.2 SECURITY ARCHITECTURE AND DESIGN

4.14.2.1 NSGI Enterprise Security Architecture

The GeoScout contractor shall develop and maintain the NSGI Enterprise Security Architecture and Design. The architecture shall be consistent with and be a separate view within the System View of the Architecture Description.

4.14.2.2 Block-Level Security Architecture

The GeoScout contractor shall develop and maintain Block-level Security Architectures and designs. The Block-level Security Architecture and Design shall be documented in the security view portion of the System View of the Architecture Description, and shall correspond to the block architecture illustrated in the temporal view portion of the system view of the architecture.

4.14.3 CERTIFICATION AND ACCREDITATION

Prior to processing classified information, AISs produced for NIMA are subject to certification and accreditation. GeoScout AIS processing collateral or Sensitive Compartmented Information (SCI) information in NIMA, or contractor facilities, shall be accredited by NIMA in accordance with DCID 6/3, regardless of location. Contractor AIS equipment or networks, within facilities accredited by the Defense Security Services that process collateral classified information, shall be accredited in accordance with DOD 5220.22-M.

The certification and accreditation (C&A) procedures defined in NIMA Instruction 8010.3R3, Certification and Accreditation of Information Systems shall be used. The GeoScout contractor

shall develop the SSAA (CDRL A018) for each AIS to be accredited. It is expected that there will be several spirals within each block. Each spiral delivered to operations will require separate certification and accreditation, each with a separate SSAA. The SSAA is a formal document containing many appendices, each being the product of a step in the C&A process. Each SSAA will be a Draft until the final approval step is signed-off. SCI Accreditation requirements include:

1. The system/network shall be configured to be fully DCID 6/3 compliant.

2. All foreign software, mobile code, and interfaces utilized by system/network shall be identified and approved.

3. The system shall be delivered with a definition and justification for ports and protocols necessary for use by system/network at the destination NIMA site or installation. Ports and protocols not required for operation shall be closed.

4. In addition to the requirements documents cited above, all systems/networks shall conform to appropriate National Policies and best practices (See Section 2.1 – Applicable Compliance Documents and NSA security configuration guidance at http://nsa1.www.conxion.com.)

4.14.4 CLEARANCES

The GeoScout contractor shall ensure that all assigned personnel are cleared to the proper level in accordance with the current version of the NISPOM and DoD 5105.21-M-1 (SCI eligibility).

5.0 DELIVERABLES – See Appendix B.

APPENDIX A - ACRONYMS AND DEFINITIONS

APPENDIX B – CDRLs

APPENDIX C – ROLES AND RESPONSIBILITIES OF THE ENTERPRISE ENGINEER, GEOSCOUT, AND OPERATIONS AND SUSTAINMENT CONTRACTORS

APPENDIX D – GEOSCOUT SPECIFIC TECHNICAL CAPABILITIES

APPENDIX E --GEOSCOUT CONTRACT WORK BREAKDOWN STRUCTURE (CWBS)

APPENDIX A – ACRONYMS AND DEFINITIONS

A_o	Operational Availability
AIS	Automated Information System
ANSI	American National Standards Institute
ATO	Approval to Operate
BPR	Business Process Re-engineering
C4ISR	Command, Control Communications and Computers Intelligence, Surveillance and Reconnaissance
C&A	Certification and Accreditation
CAIV	Cost As an Independent Variable
CDRL	Contract Data Requirements List
CFSR	Contract Funds Status Reports
CIP	Critical Infrastructure Protection
CM	Configuration Management
CMMI®	Capability Maturity Model Integration®
CMP	Configuration Management Plan
CND	Computer Network Defense
CONOPS	Concept of Operations
COTS	Commercial Off the Shelf
CPI	Critical Program Information
CWBS	Contract Work Breakdown Schedule
DCID	Director Central Intelligence Directive
DISA	Defense Information Systems Agency
DoD	Department of Defense
DoDIIS	Department of Defense Intelligence Information System
DPDW	Digital Products Data Warehouse
DSP	Defense Standardization Program
DTP	Developmental Test Plan
EIA	Electronics Industry Alliance
ENGINE	ENterprise Geospatial INtelligence Environment
ESC	Enterprise Service Center
EVM	Earned Value Management
EVMS	Earned Value Management System
FIA	Future Imagery Architecture
FPE	Front-End Processing Environment
GA	Geospatial Analyst
GIDI	Geospatial Intelligence Data Integration
GIG	Global Information Grid
GOB	Geospatial Operations Branch

HR	Human Resources
IA	Imagery Analyst
IAS	Information Access Services
IBR	Integrated Baseline Review
IC	Intelligence Community
ICMAP	Intelligence Community Multi-Intelligence Acquisition Program
ICPM	Integrated Contract Performance Management
IGCRD	Imagery and Geospatial Capstone Requirements Document
ICSIS	Intelligence Community System for Information Sharing
IDE	Integrated Digital Environment
IDS	Information Dissemination Services
IEC	Integrated Exploitation Capability
IESS	Imagery Exploitation Support System
IGC	Imagery and Geospatial Community
IMPS	Integrated Master Plan and Schedule
IPL	Image Product Library
IRAD	Independent Research and Development
IT	Information Technology
ITF	Integrated Test Facility
ITI	Information Technology Infrastructure
JIVA	Joint Intelligence Virtual Architecture
JMO	Joint Management Office
JROC	Joint Requirements Oversight Council
JTA	Joint Technical Architecture
JTW	Joint Targeting Workstation
KPP	Key Performance Parameter
LAN	Local Area Network
LCC	Life Cycle Cost
MA	Mission Assurance
MIDB	Modernized Integrated Database
MPU	Modernization Plan Update
MRB	Mission Requirements Board
Multi-INT	Multiple Intelligence
NARA	National Archives and Records Administration
NEA	NSGI Enterprise Architecture
NES	National Exploitation Systems
NETIPT	NSGI Enterprise Transformation Integrated Product Team
NEWS	NIMA Enterprise Workforce System
NGC	NIMA Geospatial College

NIES	NIMA Imagery Exploitation System
NIMA	National Imagery and Mapping Agency
NISPOM	National Industrial Security Program Operating Manual
NORD	NSGI Operational Requirements Document
NPE	NSGI Pre-Production Environment
NSA	National Security Agency
NSES	NIMA Systems Engineering Support
NSGI	National System for Geospatial Intelligence
NSP	Not Separately Priced
NTM	National Technical Means
O&S	Operations and Sustainment
OMB	Office of Management and Budget
ORD	Operational Requirements Document
P3I	Pre-planned Product Improvement
PKI	Public Key Infrastructure
POM	Program Objective Memorandum
PMAA	Production Management Alternate Architecture
PMP	Program Management Plan
PPP	Program Protection Plan
PSMP	Program Support Management Plan
QA	Quality Assurance
RFP	Request for Proposal
RMP	Risk Management Program Risk Management Plan
RMS	Requirements Management System
RRS	Remote Replication Systems
SBU	Sensitive But Unclassified
SCG	Security Classification Guide
SCI	Sensitive Compartmented Information
SCOTS	Standards-based Commercial Off the Shelf
SEATS	System Engineering Analysis and Trade Studies
SI	System Integrator
SOC	System Operations Concept
SOO	Statement of Objectives
SOR	Statement of Requirements
SOW	Statement of Work
T&E	Test and Evaluation
TEMP	Test and Evaluation Master Plan
TLOS	Thin–Line Operational System
TMS	Targeting Management System

TPED	Tasking, Processing, Exploitation, and Dissemination
TPM	Technical Performance Measure(s)
USIGS	United States Imagery and Geospatial Information System
WALA-IA	Washington Area Library Architecture Imagery
WAN	Wide Area Network
WARP	Web-based Access and Retrieval Prototype
WBS	Work Breakdown Structure

DEFINITIONS

Business Case. An acquisition/procurement business case is a comprehensive assessment of the economic factors. The business case applies to decisions involving proposed and existing business methods; and current and proposed information technology. It includes benchmarking against the best-accepted practices in both the private and public sectors. A business case quantifies costs, benefits and risks. It compares alternatives to the baseline, where the baseline is business as usual; and the alternative is the management initiative leading to savings. The baseline includes only business that is subject to change. A business case provides one major input to the decision makers.

Capability Maturity Model® Integration (CMMI®). The purpose of Capability Maturity Model® Integration (CMMI®) is to provide guidance for improving an organization's processes and its ability to manage the development, acquisition, and maintenance of products and services. CMMI® places proven practices into a structure that helps an organization assess its organizational maturity and process area capability, establish priorities for improvement, and guide the implementation of these improvements.

Change Management. Change management is managing the continuous process of aligning an organization with its environment by ensuring the collaboration, participation, and communication necessary to implement effective change.

Computer Network Defense (CND). Actions taken to protect, monitor, analyze, detect, and respond to unauthorized activity within DoD information systems and computer networks. NOTE: The unauthorized activity may include disruption, denial, degradation, destruction, exploitation, or access to computer networks, information systems or their contents, or theft of information. CND protection activity employs information assurance protection activity and includes deliberate actions taken to modify an assurance configuration or condition in response to a CND alert or threat information.

Continuity of Operations (COOP). A comprehensive and effective program to ensure continuity of essential Federal functions under all circumstances as well as the backup and recovery of systems and data essential to business continuity.

COPPER Network. New Secret Collateral NIMA network after the Secret Collateral Environment (SCEN) moves to SCI. Current IOC is late February 2003.

Critical Infrastructure Protection (CIP). Plans, programs and operations undertaken to assure the continuity and viability of the economy and the government.

Enterprise Geospatial Intelligence Environment (ENGINE). The program identified to create an engineered, current, capable, reliable IT infrastructure for NIMA.

Evolutionary Acquisition. An acquisition strategy that defines, develops, produces or acquires, and fields an initial hardware or software increment (or block) of operational capability. It is based on technologies demonstrated in relevant environments, time-phased requirements, and demonstrated manufacturing or software deployment capabilities. These capabilities can be provided in a shorter period of time, followed by subsequent increments of capability over time that accommodate improved technology and allowing for full and adaptable systems over time. Each increment will meet a useful capability specified by the user (i.e., at least the thresholds set by the user for that increment); however, the first increment may represent only 60% to 80 % of the desired final capability.

There are two basic approaches to evolutionary acquisition. In one approach, the ultimate functionality can be defined at the beginning of the program, with the content of each deployable increment determined by maturation of key technologies. In the second approach, the ultimate functionality cannot be defined at the beginning of the program and each increment of capability is defined by the maturation of the technologies matched against the evolving needs of the user.

Geospatial Intelligence. The exploitation and analysis of imagery and geospatial information to describe, assess, and visually depict physical features and geographically referenced activities on the Earth.

Heritage System. A system that was acquired after the formation of NIMA as an organization.

Increment or Block. A useful and supportable operational capability that can be effectively developed, produced or acquired, deployed and sustained. Each increment of capability will have its own set of thresholds and objectives set by the user.

Information Assurance (IA). Information Operations (IO) that protect and defend information and information systems by ensuring their availability, integrity, authentication, confidentiality, and non-repudiation. This includes providing for restoration of information systems by incorporating protection, detection, and reaction capabilities and includes robust systems design that ensures maximum confidence in data quality, retention, storage and utilization to include prevention of corruption.

Information Technology/Disaster Recovery (IT/DR). Plans and operations that focus upon data/computer center and/or local/wide area network recovery following a disruption including specific actions for restoring or recovering IT and other systems after they fail.

Infrastructure. The NSGI infrastructure provides the common communications networks, core computing systems and services, and facilities that support information management, archive and dissemination, exploitation, and corporate applications. It consists of the communications, processing, storage, operating systems, and common support services that sustain NSGI operations. The infrastructure establishes the common operating environment that supports interoperability for exchanging information. Infrastructure resources and services may be provided by organizations outside of NIMA and may be shared by the NSGI and other enterprises.

Integration. The process of combining components, usually hardware and software, into a new, larger component to achieve some architectural requirement. Integration requires resolution of compatibility issues between components that are to be interconnected. Integration attempts to allow sharing of a common resource (such as data) without the need for intermediate translations from one format to another. Note that the Common Operating Environment is a technique for achieving integration that ensures interoperability. (Defense Information Infrastructure Common Operating Environment IRTS)

Integrator. The GeoScout contractor integrates or incorporates NIMA's current disparate operations, processes, and systems into one coherent organization and an NSGI that satisfies the NIMA mission and the objectives and goals stated herein.

Legacy System. A system that was acquired prior to the formation of NIMA as an organization.

Life Cycle Cost (LCC). The total cost to the government of acquisition and ownership of that system over its useful life. It includes the cost of development, acquisition, operations, and support (to include manpower), and where applicable, disposal. For defense systems, Life Cycle Cost is also called Total Ownership Cost (TOC). (Defense Acquisition University (DAU))

Life Cycle Management (LCM). A management process, applied throughout the life of a system, that bases all programmatic decisions on the anticipated mission-related and economic benefits derived over the life of the system. (DAU)

Life Cycle (Weapon System). All phases of the system's life including research, development, test and evaluation (RDT&E), production, deployment (inventory), operations and support (O&S), and disposal. (DAU)

Migration (system). Incrementally creating a more streamlined, efficient, smaller and cheaper suite. (USIGS Glossary)

Multi-Intelligence (Multi-INT). The transfer of discipline-generated filtered data and information and the collaborative activities between two or more intelligence specialties/disciplines that materially contribute to the accomplishment of the intelligence mission of one or more of the involved disciplines. It includes integration of filtered data and information generated by one discipline with that generated by another discipline to produce

knowledge and discipline intelligence with accuracies, confidence levels, timeliness and clarity not available through the use of single specialty tradecraft and processes.

National System for Geospatial Intelligence (NSGI). The integration of technology, policies, mission and corporate capabilities, and doctrine necessary to conduct Geospatial Intelligence in a multi-intelligence environment.

Pre-Planned Product Improvement (P3I). A traditional acquisition strategy that provides for adding improved capability to a mature system.

Spiral Development. An iterative process for developing a defined set of capabilities within one block. This process provides the opportunity for interaction between the user, tester, and developer. In this process, the requirements are refined through experimentation and risk management, there is continuous feedback, and the user is provided the best possible capability within the block. Each block may include a number of spirals. Spiral development implements evolutionary acquisition.

Transition Plan. For the purpose of the GeoScout SOW a Transition Plan describes the evolution of NIMA from its current operating state to the GeoScout contractor's system architecture, including the migration of legacy and heritage systems.

APPENDIX B – CDRLs

CDRL Number	CDRL Title	SOW Paragraph
A001	Data Accession List	Paragraph 4.1.13
A002	NSGI System Transition Plan	Section 3.4
A003	Life Cycle Cost Estimate (LCCE)	Section 3.4 and 4.4
A004	Business Case	Section 3.4
A005	Block Implementation Plan	Section 3.4
A006	Interface Plans and Processes (EE, O&S, FIA JMO, respectively)	Section 3.6
A007	Business Process Re-engineering (BPR) Plan	Section 3.7
A008	Contract Work Breakdown Structure (CWBS) including CWBS Dictionary	Section 4.2
A009	Contract Master Schedule (CMS)	Section 4.3
A010	Cost Performance Report (CPR)	Section 4.3
A011	Metrics Management Plan (MMP)	Section 4.3
A012	Contract Funds Status Report (CFSR)	Section 4.3
A013	Product Support Management Plan (PSMP)	Section 4.9
A014	System Development Test Plan (SDTP)	Section 4.10
A015	Training Plan and Materials	Section 4.11
A016	Program Protection Plan (PPP)	Section 4.14
A017	Security Classification Guide (SCG)	Section 4.14
A018	System Security Authorization Agreement (SSAA)	Section 4.14

APPENDIX C – ROLES AND RESPONSIBILITIES OF THE ENTERPRISE ENGINEER, GEOSCOUT, AND OPERATIONS AND SUSTAINMENT CONTRACTORS

The Acquisition Strategy Framework, displayed in Figure 1, is intended to show a three-tier hierarchy of support to NSGI Transformation: Enterprise Engineering, System Integration, and Operations & Sustainment. This document is intended to provide the next level of breakout of this framework into more specific roles and responsibilities for each tier.

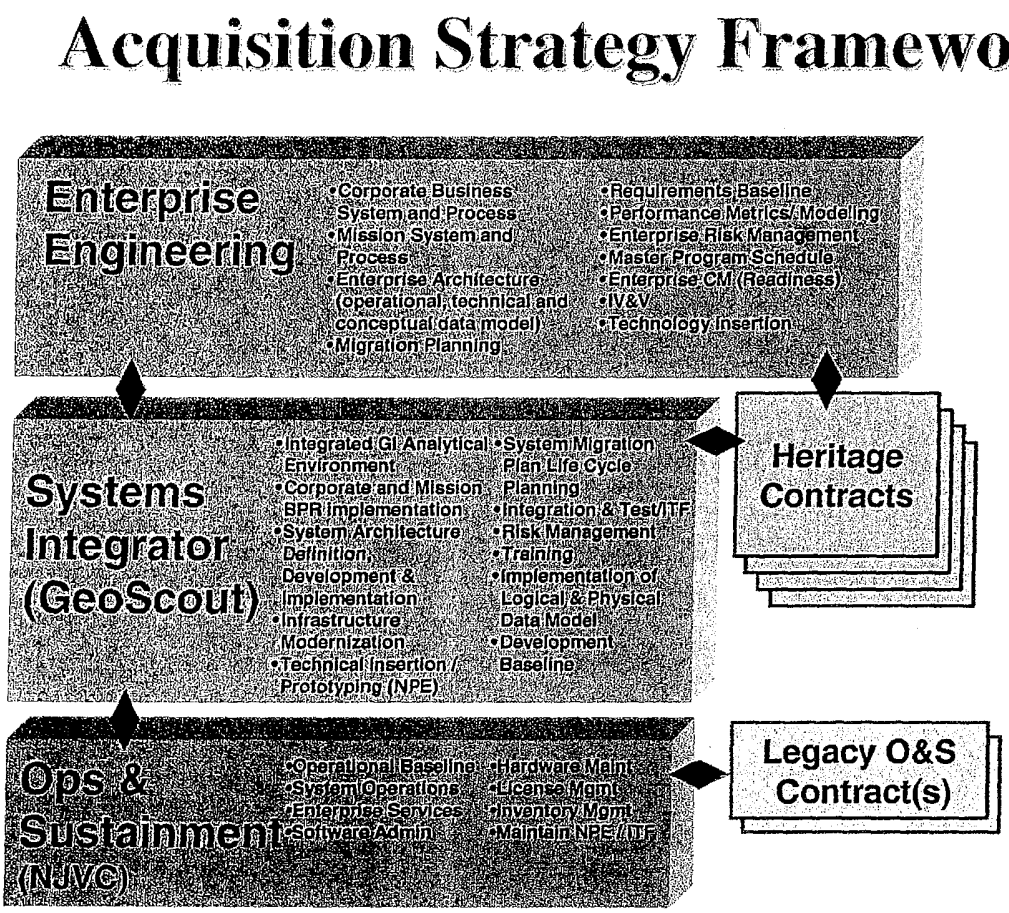


Figure 1 Enterprise Acquisition Framework

I. ENTERPRISE ENGINEERING

A. Overview

The Enterprise Engineering program will provide independent engineering support across the enterprise, facilitate the application of consistent, unified systems engineering principles, evolve the technical and operational architecture, and assure adherence to the standards. The NIMA Enterprise Architect (NIMA/ET) and the NIMA Chief Engineer (NIMA/AE) will manage the Enterprise Architecture developed under the NEA contract. The Enterprise Engineering program

will provide direct support to the NIMA Enterprise Architect and the NIMA Chief Engineer to accomplish this.

This strategy moves NIMA from segmented systems engineering support tasks to a unified *enterprise* engineering approach. Enterprise engineering is the application of systems engineering principles and practices across an organization, from sources through users, to manage and maintain the technical and operational view of the Enterprise Architecture, and assure adherence to approved standards. Enterprise Engineering is needed to provide the NIMA Enterprise Architect and the NIMA Chief Engineer with the necessary skills and resources to manage the Enterprise Architecture developed by the GeoScout Program.
The Enterprise Engineering contractor will manage and ensure the end-to-end integrity of the NSGI, provide an operational description and requirements specification of the planned NSGI that will include:

- Intended deployment of capabilities over operational nodes
- Connectivity among these capabilities and nodes
- Interfaces to external systems and users
- System behavior in terms of use cases and data flows

Enterprise Engineering will document and establish a roadmap and schedule for the architecture, the security environment, the conceptual data model and the concept of operations, ensure that the roadmaps converge at a common point in the same timeframe to deliver a capability-based effectivity, and chair or moderate permanent or ad hoc fora to facilitate accomplishment of its mission and functions.

B. Detailed Enterprise Engineering Tasks

The following provides the detailed Enterprise Engineering tasks keyed to the areas shown in Figure 2.

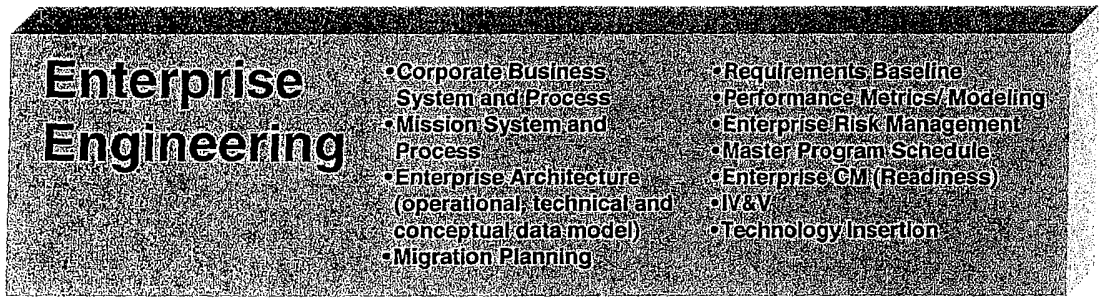


Figure 2 Enterprise Engineering

1. *Corporate Business Systems and Processes*

- Define mission and corporate business architecture views for NIMA and NSGI
- Capture, define and maintain mission and corporate business processes for NIMA and NSGI "as is" and "to be" products and services

- Develop and maintain business processes and rules based on the new NIMA business model
- Define and monitor business related metrics
- Establish and maintain value chains of key business lines, work to identify cost of business
- Develop and maintain business process models that identify bottlenecks and target investment areas that support the Government's decisions on business process re-engineering
- Develop definition of Geospatial Intelligence assurance attributes reflective of the Functional Manager's (FM) confidence in NIMA's information products
- Support cross-organizational effort to define/refine Geospatial Intelligence assurance attributes and potential methods for their capture or generation
- Support the geospatial assurance teams to define system requirements reflective of needs that allow both generation and retention of geospatial attributes, visualization tools and processes
- Identify changes in aggregate information/products as potential agency key performance parameters in support of agency's use of geospatial assurance information metrics
- Evaluate cost, schedule and performance metrics to assist in resource decisions
- Provide and align links from the new business model, processes and functions to federal, intelligence community and defense architecture-related projects
- Manage technology insertion planning and processes

2. ***Mission Systems and Processes***
   - Working with the NIMA Enterprise Architect, the Enterprise Engineer, and the customers:
     - Define and refine mission system requirements and processes
     - Assist NIMA with enterprise architecture, enterprise engineering oversight, governance, and measures
   - Establish and refine governance processes for the Enterprise Architecture
   - Evolve roles and alignment of business processes and Information Technology (IT)
   - Evolve operational and technical views of the Enterprise Architecture to enable multi-enterprise, multi-INT access and processes

3. ***Enterprise Architecture***
   - Evolve and maintain the operational, technical, and conceptual data model views of the Enterprise Architecture in accordance with C4ISR framework, to include information assurance
   - Identify features of the Enterprise Architecture and provide cross-reference trace to other applicable frameworks (Federal Enterprise Architecture, DoD Functional Management Model, Global Information Grid, etc.)
   - Identify NSGI user relationships and their information needs
   - Identify and recommend standards for interoperability, areas of evolving standards and languages that should be considered for future incorporation into NSGI with rationale and estimates of benefits vs. impacts with recommended timelines

- Evolve and maintain the conceptual data model based on GeoScout deliverables, defining data content and interoperability
- Support registry of NSGI data models and maintain trace between approved data models
- Develop and implement a process to evolve and maintain the GeoScout Contractor provided conceptual data model, consistent with best industry practices
- Document and maintain the definition of cross-NIMA and cross-NSGI domain data providing support to architecture data views, monitor change and compliance
- Define associated metrics for the operational and technical views of the Enterprise Architecture relevant to analyzing performance and satisfaction of requirements
- Support architectural change evaluation based on a data and standards view
- Recommend NSGI data standards development activities and metrics
- Undertake engineering tasks in support of the Enterprise Architect and the Chief Engineer
- Provide and carry out a standards management process to accomplish NIMA mission for imagery and geospatial information, systems, and services
- Support coordination of the NSGI Objective Operational activities within NIMA and external coordination of architecture activities with Commands, Services, and Agencies
- Develop Technology Insertion plan and processes

4. ***Migration Planning***

- Based on mission and corporate business model and evolving mission, define and prioritize corporate and mission functions that need to be migrated
- Evaluate data migration plans, and support definition and execution of post-migration validation methods
- Recommend strategy and requirements development and initial options for long-term archival and preservation of legacy and evolving imagery and geospatial products
- Identify and provide assessment of NSGI architectural impacts based on emerging customer needs discovered through the community processes and the Defense Acquisition Board for new weapons or processes with Geospatial Intelligence needs
- Support different levels of migration: system-to-system migration and overall system migration, and support both mid- and long-range migration planning for NIMA and NSGI
- Provide a strategy in each migration plan that effectively addresses the application of standards applicable to NSGI and NSGI's evolution
- Develop and propose innovative alternatives for System Engineering challenges while constantly increasing the efficiency of resource utilization
- Provide NIMA with insight into industry IT and IT acquisition best practices
- Perform gap analysis to assess the state of legacy systems, technology maturity, acquisition opportunities, and fiscal reality of the migration

5. ***Requirements Baseline***

- In support to the NIMA requirements management process, identify, document, in accordance with government priorities, customer requirements based on:
  - Cost, functionality, schedule, and performance
  - Mission need

  - Corporate business requirements
- Maintain the NIMA/NSGI list of unfunded requirements
- Support tracing submitted or driving need to/from ORD and lower level documents
- Define and use an integrated, end-to-end, System Needs and Requirements (SNR) management process consistent with a system engineering CMMI level 3 or higher organization
  - This process includes and defines the activities of all process participants, including the Contractor's, the Government's, and NIMA-corporate and NSGI implementers (GeoScout, heritage, and legacy contractors)
- Create and maintain an automated, comprehensive database of requirements information that is used to conduct the SNR analyses
- Develop a flexible requirements process that can quickly, effectively, and efficiently respond to dynamic mission requirements

6. ***Performance Metrics and Modeling***
   - Provide a Performance Metrics Plan that defines the enterprise metrics to be captured, refined, and maintained with a rationale for each metric's impact on NIMA's mission
   - Establish the process for capturing metrics that will include acceptance of metrics data captured by the GeoScout and O&S contractors and define this process and defend its rationale in the Program Metrics Plan
   - Define and implement business reengineering modeling process and requirements
   - Report performance metrics and modeling trends and issues at each Quarterly Program Review to include recommendations for Government and Contractor actions based on the reported results
   - Deconflict metrics throughout process
   - Develop and implement a modeling and simulation process and to support their evolution of the Operational and Technical Architecture, management of the Business Process (Corporate and Mission), Systems Needs and Requirements, Technical Planning, Risk Management, Configuration Management, Technical Insertion, Independent Verification and Validation, and Security Engineering
   - Provide performance metrics and modeling results, trends and issues that support specific contractor studies at related study forums
   - Host a quarterly forum to validate their modeling and simulation activities with Subject Matter Experts (SMEs)
   - Evaluate and maintain NSGI performance metrics and monitor

7. ***Enterprise Risk Management***
   - Develop and implement an integrated Risk Management process consistent with best industry practices and a system engineering CMMI® level 3 or higher organization
   - Interface with the GeoScout and O&S contractors on NSGI risk issues/matters that impact the enterprise-level risk issues/matters
   - Assess and prioritize enterprise resources to mitigate risk
   - Identify, capture and monitor risk related metrics

8. ***Master Program Schedule***

- Maintain NIMA/NSGI master program schedule for enterprise activities
- Maintain the Master Schedule database and ensure that milestones and activities are linked to show dependencies and to support critical path analysis for Enterprise Projects
- Coordinate with GeoScout and O&S contractors to receive and deconflict NSGI system input for Master Schedule
- Communicate status and dependencies at appropriate forums
- Maintain traceability of changes and historical records of the Master Schedule

9. ***Enterprise CM (Readiness)***
   - Develop, implement, and maintain an integrated Configuration Management (CM) process consistent with best industry practices and a system engineering CMMI® level 3 or higher organization
   - Manage enterprise level CM boards and documentation
   - Coordinate with the GeoScout and O&S contractors on NSGI development- and operational-level CM issues/matters that impact the enterprise-level CM process
   - Ensure clear link of decisions, projects to IT related reporting items
   - Support yearly preparation and review of IT exhibits focused on enterprise architecture aspects
   - Maintain and implement a quality review process for Requests for Change (RFC) with checklists to ensure quality and completeness of each RFC

10. ***IV&V***
   - Perform independent verification to provide evidence that requirements and development processes are correctly implemented
   - Perform independent validation to provide evidence that a product will fulfill the customer's expectations
   - Conduct Independent Verification and Validation (IV&V) to determine and approve satisfaction of requirements, interoperability, and readiness assessment for new capability deliveries
   - Perform IV&V functions to include Requirements Analysis/Trace/Inspection, Test planning, execution (or witnessing), and report generation
   - Conduct ITF and site ITF testing
   - Provide for IV&V Metrics Program
   - Perform enterprise issue investigation (i.e., analysis, inspection, but not resolution)
   - Prioritize and schedule ITF activities to support enterprise priorities
   - Develop Enterprise Test and Evaluation Master Plan (TEMP) and independent test plans
   - Conduct Beta I test activities at the ITF based on DoD Intelligence Information System (DoDIIS) rules
   - Ensure standards compliance (e.g., NITF) as well as certification, to include final requirements sell-off in those areas
   - Establish quality requirements for enterprise test data
   - Provide support to the Government's and GeoScout's Quality Assurance programs through independent verification that GeoScout Contractor is using proper development processes and developing the correct requirements and through independent validation of end to end GeoScout system performance through Test and Evaluation

- Develop, maintain and implement Enterprise Engineering Test and Evaluation (T&E) process consistent industry best practices and with SE-CMMI® level 3 or higher processes
- Monitor and audit compliance with Enterprise Engineering implemented processes, and execute process improvement to the process as required

11. Technology Insertion

- Develop, implement and maintain an Enterprise technology insertion process
- Advise, facilitate and provide Secretariat duties to NIMA's Technology Insertion Steering Group, chaired by a Government program manager
- Provide a technical pros/cons evaluation of each technical insertion candidate, which includes an analysis of impacts of technology insertion change to NIMA's vision, NIMA's mission, or any aspect of the Enterprise Architecture
- Prioritize candidates for activation in NPE for government approval
- Define and maintain, in coordination with GeoScout Contractor, the process for movement of changes through NPE to NSGI/NIMA operations
- Provide support to the Chief Engineer through IV&V of all technology insertion items

II. GeoScout

A. Overview

GeoScout is the prime contract responsible for transforming the NSGI into an agile, multi-faceted 21st century architecture. The GeoScout contract will:

- Implement system integration for all NSGI systems, to include all heritage and legacy systems
- Acquire and develop new system capabilities
- Modernize the infrastructure required to transform the mission and corporate environments and support COOP and contingency operations, via continuous spiral technology insertion
- Be responsible for the technical interfaces with commercial partners (commercial imagery, Global Geospatial Intelligence (GGI) production, and other outsourced activities)
- Implement an architecture that realizes the objectives of the NIMA Statement of Strategic Intent, replacing legacy and heritage functionality over time consistent with available funding and business case analysis

The GeoScout contractor will be managed by NIMA/A, but be responsive to NIMA/P, NIMA/I, NIMA/TO, and external customers, the Enterprise Architect, NIMA/AE and Enterprise Engineer.

GeoScout will implement the modern NSGI architecture that supports 24X7 analysis and production operations in a continuing crisis environment.

The NSGI transformation will provide NIMA customers with the Geospatial Intelligence that meets the need for on-demand information (fused, global, day/night/all weather) and in-depth analysis and tradecraft, integrated with the user's operational environment. NIMA's customers range from a "data consumer" who requires the most basic data to a "knowledge seeker," who requires integrated Geospatial Intelligence to make informed decisions. "Information partners" require access to Geospatial Intelligence and work collaboratively with NIMA to address broad Community information needs. In the NSGI transformation, NIMA becomes a broker of information and knowledge, as well as an enabler of Community collaboration.

GeoScout will enable NIMA's transformational outcomes: all digital data-centric environment, state-of-the-art approach, enhanced analyst workplace, and a "ubiquitous knowledge map."

To support the above overarching requirements, GeoScout will implement architectural innovations that address the following objectives:

- Intelligent web agents for integrated Intelligence Community (IC) data mining
- Automated processing
- IC-wide collaborative problem solving
- Geospatially-enabled wide area search
- Continuous rapid technology insertion
- Maximum use of Standards-based Commercial Off-the-Shelf (SCOTS) products
- Integrated logical and physical data models to enable a data-centric architecture
- Co-registered measurement and signatures intelligence (MASINT) with Geospatial Intelligence data

Technology insertion will serve as the engine that drives continuous, ongoing transformation of NSGI. Within NIMA's new technology insertion paradigm, the Geospatial Intelligence Advancement Test bed (GIAT) will serve as the new model for developing innovative solutions for NIMA's "hard problems." Inherent technology sources, in addition to the GIAT, include but are not limited to the National Technical Alliance (NTA), Advanced Research and Development (AR&D) partners, Intelligence Community partners, vendors, and the GeoScout and Enterprise Engineering contractors. Unlike past technology development efforts, the GIAT will physically collocate technology researchers and operational users to attack problems that are unique to Geospatial Intelligence and beyond commercial solutions. The GIAT will develop tools, technologies, and techniques that are evaluated in a real world environment. The GIAT provides a risk tolerant environment that promotes informed risk taking, and enables both quick turn-around and AR&D of exotic technologies.

If successful in the experimental environment, the GIAT and other technology insertion initiatives will be proposed for the NPE managed by the GeoScout contractor. GeoScout will leverage the NPE as the virtual rapid prototyping facility where new business process experiments will address real-world Geospatial Intelligence issues using current and emerging cutting-edge technologies. The NPE will use the results of AR&D sponsored by the NIMA InnoVision Directorate, other research and development efforts, and good ideas from other sources to operationally prototype real solutions for real users.

GeoScout will provide NIMA customers with integrated Geospatial Intelligence capabilities, such as integrated commercial imagery ordering/distribution; full airborne data ingest, access and utilization; and expanded multi-INT collaboration, to include product access and automated cross-mission cueing.

Finally, GeoScout will encompass all the current NSGI Tasking, Processing, Exploitation, and Dissemination (TPED) functionality plus full enterprise integration with information management, business workflow processes, finance and human resources.

B. Detailed GeoScout Tasks

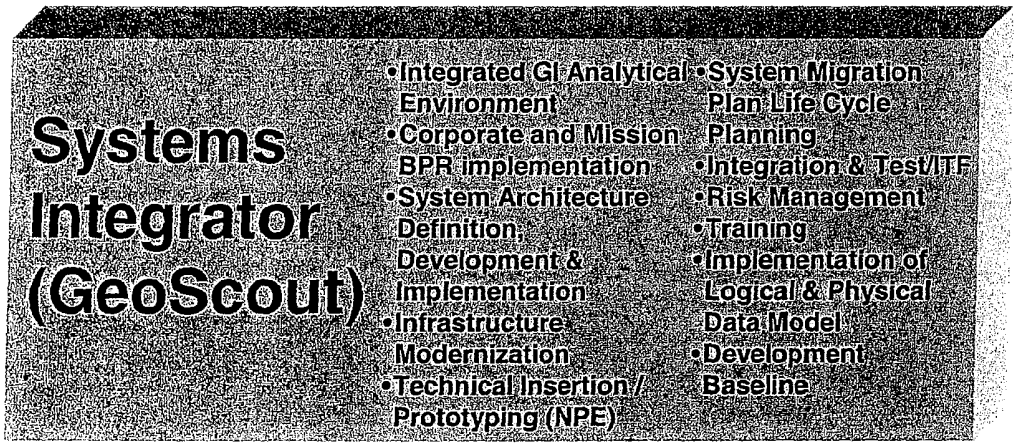


Figure 3 Systems Integrator (GeoScout)

The following detailed roles and responsibilities have been identified for the GeoScout contractor keyed to Figure 3.

1. ***Integrated Geospatial Intelligence Analytical Environment***
   - Establish an all-digital exploitation environment
   - Deliver an architecture that is data-centric that provides quick and easy access to data regardless of where it's stored, to include multi-source, multi-INT, reference information, historical information
   - Provide tools that enable collaboration between analysts within and outside of NIMA
   - Develop an "integrated" workstation environment where analysts can intuitively bring a variety of tools and sources to bear against an intelligence problem
   - Recommend and help document refined business processes, practices, and rules

2. ***Corporate Mission BPR implementation***
   - In coordination with the Enterprise Engineering contractor and NSGI customers and users, identify, recommend, and establish new business processes and practices to take advantage of new technology and more efficient ways of doing business
   - Implement Business Process Re-engineering (BPR) for both Corporate and Mission environments
   - Incorporate approved results of BPR into block implementation plans, to include new tools, training, roles, and documentation
   - Propose, perform, and implement BPR at the GeoScout level consistent with the scope of their proposed system view of the architecture and the technical and operational architecture maintained by the Enterprise Engineer contractor

3. ***System View of the Architecture Definition, Development & Implementation***
   - Define, develop, and implement a system requirements management process that seamlessly interfaces with the Enterprise Engineer's enterprise requirements management process consistent with a system engineering CMMI level 3 or higher organization
   - Allocate system requirements (defined by the Enterprise Engineer) to the architecture components defined in the system view of the architecture
   - Dynamically update and maintain the NEA Description of the system view of the Enterprise Architecture developed as part of the NEA Study contract, titled *NEA Architecture Description.*
   - Use the system view of the architecture description to guide, manage, control, and monitor the physical implementations within each block and spiral of NSGI modernization
   - Evolve the system view of the Enterprise Architecture for NSGI in response to external factors, to include guidance from the Enterprise Engineering contractor, business cases, or technology
   - Establish, execute and maintain system engineering policies, plans and process consistent with the development and maintenance of the system view of the Enterprise Architecture, to include all heritage and legacy systems
   - Develop the system view of the Enterprise Architecture that support Continuity of Operations (COOP)

- Develop the system view of the Enterprise Architecture to provide:
  - Integrated, collaborative Geospatial Intelligence environment
  - Seamless access to data and information
  - Integrated geospatial and imagery tradecraft
  - Enterprise-wide information and workflow management capability using multiple sources
- Define, design, develop, procure and deliver blocks of operational capability that incrementally move NIMA and NSGI toward the goals and objectives
- Deliver the system and associated technical data as provided in the approved implementation plan
  - The government will review and approve all contractors' block design and implementation plans
- Define the thresholds and objectives for each defined capability
- Develop, integrate, test, and deliver the modernized NSGI system consistent with the system view of the Enterprise Architecture and the approved NSGI System Transition Plan
- Ensure the system view of the architecture accommodates users at multiple levels of security and visibility across the enterprise
- Use modeling and simulation methods and tools to design the system view of the architecture and verify that it can meet system requirements
- Maintain all new mission-specific software developed and delivered under this contract
- Develop, document, implement, and maintain a quality program to assure quality of contract deliverables and management of development processes
  - Interface with the Enterprise Engineering contractor for verification and validation of system capability deliverables
- Perform continuous technology forecasting in support of enterprise architecture planning activities
- Develop, implement, and maintain a system-level Configuration Management Process consistent with the NIMA Enterprise Configuration Management process and industry best practices.
- Develop, implement, and maintain a system-level Configuration Management Plan
- Produce a Program Protection Plan that addresses the protection of Critical Program Information (CPI) throughout the acquisition cycle.
  - Consider system vulnerabilities, specific threats, and which countermeasures to employ to protect the assets

4. ***Infrastructure Modernization***

- Define and implement an initial block of improved infrastructure capability
- Support the O&S contractors in current NSGI mission operations
- Design, develop, and integrate upgrades to NIMA's Information Technology Infrastructure (ITI)
- Demonstrate, test, document, and, in coordination with the O&S contractors, install ITI upgrades

- Address immediate and transitional infrastructure objectives for subsequent NSGI transformation upgrades and integration of custom and commercial-off-the-shelf (COTS) Geospatial Intelligence systems.

5. ***Technical Insertion/Prototyping (NPE)***
   - Establish and manage an NPE to provide a systemic approach to identifying, developing, testing, and inserting commercial technologies and state-of-the-art solutions into the system view of the architecture
   - Define and execute a continuous technology insertion process
   - Assess technology insertion opportunities
   - Develop supporting business cases and, where business cases warrant and after Government approval, insert new technology into the NSGI development baseline
   - Deploy successful NPE technology insertion capabilities into the NSGI operational environment
   - Perform technology and standards forecasting in support of enterprise architecture planning activities
   - Deliver an operational version of Thin Line Operational System (TLOS) developed under the NEA contract as the initial instantiation of the NPE

6. ***System Migration Plan***
   - Develop and implement a plan for the expeditious migration of all heritage and legacy systems into the proposed NSGI system view of the architecture, to include a plan for data migration
   - Plan for the integration of Future Imagery Architecture (FIA), airborne, commercial, and civil data sources, spanning the electromagnetic spectrum, into the proposed NSGI system view of the architecture
   - Update and maintain the NSGI System Transition Plan that address all aspects of the NSGI modernization from current as-is system view of the architecture to a to-be system view of the architecture, including FIA systems and segments, airborne, commercial, and civil data sources, spanning the electromagnetic spectrum
   - Address the migration of functionality over time with minimal disruption and no loss of required functionality
   - Plan for integration of multiple intelligence sources from other intelligence disciplines

7. ***Life Cycle Planning***
   - Develop comprehensive NSGI modernization program "alternate use" business cases for legacy and heritage program funding
     - Where the business cases warrant and after Government approval, initiate system modernization implementation efforts and provide new mission capabilities to expeditiously replace legacy and heritage capabilities consistent with the NIMA Enterprise Architecture, the NIMA Master Schedule, and without interruption to mission operations
   - Update and maintain the NSGI System Transition Plan developed as part of the NEA Study, titled *NEA Transition Plan*

- Develop and implement a robust schedule management process consistent with industry best practices for systems development
  - Include all key activities, events, milestones and reviews that make up the program.
  - Integrate with and be consistent with the Master Program Schedule maintained by the Enterprise Engineer.
- Develop life cycle cost estimates for all proposed, developed and delivered capabilities
  - Develop, refine, maintain, and use, the life-cycle cost estimate from their recommended enterprise architecture consistent with their transition plan and risk reduction activities
  - Provide total cost of ownership, (including research and development, procurement, operations and support, and disposal costs) by government fiscal year
  - Provide tradeoffs of cost, performance, and schedule
  - Employ financial return on investment modeling, including the assessment of benefits and impacts to the customers
  - Include a sensitivity analysis, which identifies program cost drivers
  - Include cost risk analyses detailing probability and confidence levels for costs generated by the model
- Develop, implement, and maintain the Program Support Management Plan, to include:
  - Coordinated approach to hardware and software maintenance, sparing, licenses for COTS products, and training of user and maintainer personnel
  - Address the transition of responsibility to the O&S contractors
  - Indicate how the contractors will provide support to sites, including domestic, foreign and forward-deployed sites

8. ***Integration & Test/ITF***

- Assume the role as the NSGI System Integrator, including program management, integration planning, design, implementation, procurement, acquisition, testing, and delivery of modernized NSGI capabilities
- Integrate and test systems developed by development contractors as specified by the Government to ensure that the delivered systems are consistent with the proposed system view of the architecture
- Integrate newly-developed mission and corporate systems as well as the legacy and heritage systems
- Minimize impact to mission-critical NSGI systems that maintain a 24 hours a day, seven days a week production environment
- Maintain all existing mission-specific software and software baselines at the time legacy and heritage mission systems transition to the GeoScout contract for integration, development and modernization
- Implement a flexible system test capability that does not require the operational NSGI to be used for new development and modernization testing
- Demonstrate, test, and assist in the validation of each proposed upgrade and/or enterprise integration
- Evaluate and document the results of all GeoScout testing activities

- Develop and maintain Requirements Verification Traceability Matrix (RVTM) and Requirements Traceability Matrix (RTM)
- Develop TEMP for the system level, capability-based effectivities
- Support requirements sell-off
- Perform system configuration management
- Perform factory (alpha) acceptance test
- Perform early integration testing and interface testing (alpha and pre-beta)
- Perform code reviews and check-out
- Beta 1 and Beta 2 tests will be conducted at NIMA's Integrated Test Facility (ITF), Joint Interoperability Test Command, and/or at user sites/facilities to be identified through mutual agreement by the GeoScout Contractor and the Government
    - Perform Beta 2 testing at operational sites
    - Support the Enterprise Engineer (IV&V) during Beta 1 testing done at the ITF and/or at user sites/facilities
- Perform system/software certification activities to include DoDIIS certification, interoperability certification, and security certification/accreditation

9. Risk Management

- Develop and implement an integrated Risk Management process consistent with best industry practices
- Interface with the Enterprise Engineer contractors on enterprise-level risk issues/matters
- Develop, document, implement, and maintain a system-level Risk Management Process that serves as a basis for identifying alternatives to achieve cost, schedule and performance goals
- Recommend budget and funding priorities
- Provide risk information for Milestone decisions
- Allow monitoring the health of the program as it proceeds.
- Describe methods for identifying, analyzing, prioritizing and tracking risk drivers
- Develop risk handling plans
- Prescribe the process for documenting, monitoring and reporting risks
- Analyze trends based on data provided by O&S

10. Training

- Develop and maintain training materials and training devices for all capabilities delivered under this GeoScout contract
- Establish and maintain life cycle training materials and training environment
- Provide training and training engineering expertise for NSGI systems in coordination with the NIMA Training and Doctrine Directorate
- Coordinate and interface with industry, customers, stakeholders and other support activities involved in planning and implementing training programs
- Develop system training plans

11. Implementation of Logical & Physical Data Model

- Implement the logical and physical data models at the system level consistent with the Enterprise conceptual data model

- Initial definition of the conceptual data model will be by the GeoScout contractor and subsequently refined by the Enterprise Engineer

- Develop and deliver a modernized, flexible, reliable, scalable, "data-centric" NSGI system view of the architecture that accommodates new sensor types and Geospatial Intelligence data sources without major redesign
- Develop, define, and maintain the logical and physical data model in conformance with the conceptual data model maintained by the Enterprise Engineering contract
- Ensure data quality control and integrity

12. Development Baseline

- Maintain CM control of the development hardware and software baseline
- Maintain the development baselines, and manage all changes to the development baseline to the O&S contractors for incorporation into the operational baseline
- Document the capabilities, changes, and strategies for the evolution of the baseline in compliance with the Enterprise Engineering Migration Plan
- Sponsor change proposals and broker with the Enterprise Engineering and O&S contractors
- Continuously evaluate development and operational baselines and recommend technology insertions, vetted with the Enterprise Engineering and O&S contractors
- Perform software code maintenance, interfacing with COTS vendors
- Perform COTS integration
- Develop custom code ("glueware") to integrate COTS
- Identify required software licenses and distribution strategy
  - Coordinate with the O&S contractor on license utilization management

III. Operations & Sustainment

A. Overview

NIMA currently employs separate Operations and Sustainment (O&S) contractors. NIMA awarded the Information Technology and Information Services (IT/IS) contract in December 2001 to the Alaskan Joint Venture Corporation, NJVC LLC, which comprises Chenega Technology Services Corporation and Arctic Slope Regional Corporation Communications. This contract provides NIMA with long-term information technology support in seven areas: printing, digital replication, networks, distributed and centralized systems, operational help desk, voice and video, and library research services.

B. Detailed O&S Tasks

The following provides detailed tasks for the O&S contractors keyed to Figure 4.

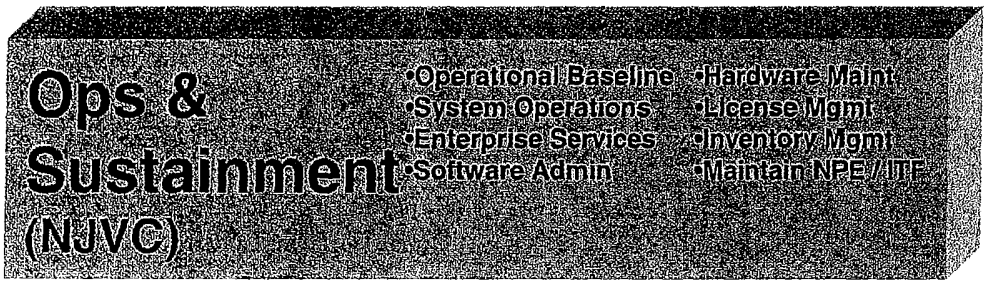


Figure 4 Ops & Sustainment (NJVC)

1. Operational Baseline

- Perform Configuration Management (CM) for all networks and systems within the operational baseline
- Ensure that as-built networks and segments conform to the approved operational baselines and comply with operational baseline guidelines
- Conduct Operations Configuration Management Board (Ops CMB) meetings
  - Perform as configuration control authority for all operational segments within the operational baseline
  - Manage all system level problem reports

2. System Operations

- Perform systems operations management that provides system management, data management, and security activities for the segments, corporate systems, networks, and NIMA communications
- Ensure that the NSGI is operational and secure
- Provide imagery, Geospatial Intelligence, non-imagery-based data, and other information to production elements and the end users
- Perform system and network management services to include:
  - Maintain accounts and privileges
  - Perform software and data backups

- Monitor and maintain system health
- Support upgrades and CM
- Tune the performance of the operational system
- Develop operations procedures and crisis contingency plans
- Perform start-up, shutdown, and re-boot as necessary.

- Perform ISSO services, which include establishing and performing security certification, monitoring system security, and enforcing security policy.
- Perform data base administration (DBA) functions

3. ***Enterprise Services***

- Perform enterprise services, which is a virtual "one stop shop" for all NIMA-managed systems requiring hardware, software, network, video, and telephone support (includes administrative phones, pagers, cell phones, and secure phones)
- Operate the Enterprise Service Center (ESC) that provides customer-facing activities in support of the operational NSGI
- Coordinate with GeoScout and the Enterprise Engineering contractors to ensure that transition and operational requirements can be met
- Consolidate enterprise-wide services for infrastructure monitoring to include: remote restore, fault isolation, and expert resource deployment
- Provide 24-hours-a-day, seven-days-a-week operations center that manages all operational ITI activities across NIMA
- Provide staff to operate the ESC
  - Additional contractor personnel from GeoScout will augment the ESC staff to provide specialized skills as required and agreed to by the GeoScout and O&S contractors

4. ***Software Administration***

- Provide software administration support for NSGI systems
  - Install new, tested versions to operational and corporate systems
  - Apply component vendor fixes (patches)
  - Perform emergency patches to maintain operational capability
- Provide standardized mechanism for evaluating and maintaining the operational software baseline
  - Software maintenance involves all changes to deployed software brought about as a result of a deficiency report, technology insertion, or a request for change
- Perform product support functions including technology implementation, fault isolation, and supporting product release and installation
- Control access and schedule any actions related to operational software to ensure minimal disruption to on-going mission operations

5. ***Hardware Maintenance***

- Maintain operational hardware baseline and follow-on acquisition and service of all IT hardware
- Assume responsibility for hardware maintenance activities once the equipment has successfully transitioned to O&S

- Perform preventive and remedial maintenance, hardware logistics and upgrade support, technical investigation and fault isolation, equipment relocation, and warranty management

6. *License Management*
   - Perform license configuration management and issue resolution
   - Audit and track license use
   - Maintain and track accuracy of the data base of enterprise licenses and the standard desktop, Geospatial Intelligence, and corporate applications
   - Manage requests for optional and non-standard products
     - Does not monitor and manage licenses for COTS products bought solely for evaluation purposes
     - Will begin management of the product when a full license is acquired
   - Maximize efficient licensing practices
   - Manage all license renewals and terminations

7. *Hardware and Software Inventory Management*
   - Track all deployed software and hardware configuration items available to and within the operational baseline
   - Perform physical audits and reports on all hardware and software configuration items in the operational baseline in order to track, deploy, update/change, or delete assets across the NIMA network of users
   - Maintain deployment mechanism for the electronic dissemination, installation, and configuration of software packages, updates, and patches to servers and workstations through the NIMA networks

8. *Maintain NPE and ITF*
   - Maintain the operational baseline for the NPE and the ITF environments and facilities
     - Perform System Administration
     - Perform Data Base Administration
     - Perform security
     - Perform logistics management
     - Conduct administrative scheduling of the ITF
     - Manage and maintain test data
     - Perform configuration management of the facilities and baselines
   - Provide NPE and ITF operational baseline configuration management
   - Provide administrative maintenance of NPE and ITF schedule
   - Maintain and provide test data
   - Perform ITF website management and maintenance
   - Provides advisory support to the Technology Insertion Board run by the Enterprise Engineering contractor
   - Maintain COTS licenses and hardware in the NPE and ITF

APPENDIX D -- GEOSCOUT TECHNICAL CAPABILITIES

1.0 BACKGROUND

This appendix details, for certain SOW requirements, the specific technical capabilities that the Government expects to see in the below referenced blocks with regards to systems integration, infrastructure, architecture and information management. The purpose of specifying and binning the technical capabilities is to allow the contractor to accurately cost Blocks I and II. SOW Section 3, Technical Requirements, still apply; this appendix provides additional detail where necessary.

2.0 BLOCK I SPECIFIC CAPABILITIES

2.1 INFRASTRUCTURE MODERNIZATION

2.1.1 NETWORK TRANSPORT LAYER IMPROVEMENTS

2.1.1.1 Design, develop and deliver a robust and fast Local Area Network (LAN) that provides consistent network connectivity at all sites and provides the ITI capacity to allow any work area to be converted to a production area by replacing the workstation. The plan must address substantial improvements in LAN connectivity to Wide Area Networks (WANs) that meet National Security Agency (NSA) guidelines. Designs will follow or improve upon current NIMA engineering approaches or activities in the following areas:

- New network cabling will be standard ribbon cabling home runs terminating in the secure communication closet from the user workstation location.
- Network area coverage capable of supporting six network and two copper telephone connections at each work area.
- Reduce network complexity by minimizing use of hubs, routers, and edge devices and focusing instead on larger redundant centralized switches, located in access-controlled communications closets.
- Provide robust, high-speed connectivity across all networks by converting local area networking to GIG or other state-of-the-practice technology bested suited for supporting NIMA's mission. Future requirements will be based on GeoScout contract design specifications and available resources.
- Improve Network redundancy to meet COOP and contingency operations requirements.

2.1.1.2 Design, Develop, and Deliver a meta directory system that integrates with or bonuses off of NIMA's current domain controller system and addresses the integration of the following:

- Integrate Human Resources (HR)/Peoplesoft, Personnel Security (SI)/Security Management System, Facilities (SI)/Computer-Aided Facilities Management, E-Mail (ET), and Enterprise License and Inventory Management (ET) into the meta directory on the Enterprise AQUA network.

- Integration with Intelligence Community Full Services Directory on the Enterprise SCI AQUA network.
- Integration with Department of Defense Global Directory Services on the Enterprise Secret COPPER network.
- Integration with Department of Defense Global Directory Services on the Enterprise Unclassified Sensitive but Unclassified (SBU) network.

2.1.1.3 Design, Develop, and Deliver the integration of NIMA's SKYLAN with the Enterprise SCI AQUA network.

2.1.2 ENTERPRISE MANAGEMENT

2.1.2.1 Design, develop, and deliver an Enterprise Service Center to provide responsive enterprise management through a consolidated help desk, technical support and enterprise monitoring capabilities. Designs will follow or improve upon current NIMA engineering approaches in the following areas:

- Develop specific space and equipment requirements needed to stand up the ESC.
- Develop and implement improved management tools, including network monitoring/fault isolation tool suite.
- Identify staffing requirements and transition plan to integrate all legacy, heritage and GeoScout developed systems, applications, etc. into the ESC.
- Implement a back-up ESC capability physically separated from the primary ESC. The back-up ESC can be designed to augment the functions of the primary ESC (for example but not limited to, one ESC located in NIMA East and a smaller, localized ESC located in NIMA West). The second ESC will have the capacity and capability to immediately serve as the primary ESC in COOP and Contingency operations should the primary ESC become inoperable. Both ESC including COOP and contingency operations are to be completely integrated with the overall ITI.

2.1.3 DATA AND STORAGE MANAGEMENT

Design, develop and deliver a time-phased application and database server consolidation capability that optimizes the use of modern data storage technologies and satisfies continuity of operations (COOP) and contingency operation objectives.

2.1.4 INFORMATION MANAGEMENT (GATEWAY)

2.1.4.1 Design, develop, and deliver a modernized NIMA Gateway which supports the Agency's Information Management requirements. Capability includes delivery of availability, security, disaster recovery, and scalability based upon acceptable industry standards for a 24x7 critical infrastructure operation. This capability should be delivered as part of the portal/web access initiative in Block I.

2.1.4.2 Provide tools needed to fully implement the Imagery Throughput Management program recommended in the NETIPT Final Report.

2.1.5 WORKPLACE IMPROVEMENTS

2.1.5.1 Design a Prototype Secure Communications Closet for the NPE that (1) consolidates Network and Telephone communications and crypto logic gear, (2) reduces complexity, and (3) provides state-of-the-art technologies that comply with the contractor's proposed architecture.

2.1.5.2 Incorporate workstation requirements into infrastructure design and planning to include the following minimum goals:

- Reduce overall workstation counts to approximately 1.3 workstations per NIMA employee (Government, Contract, and Military).
- Establish the AQUA network as the primary network environment for NIMA.
- Where mission requirements allow, reduce SBU workstations to a primarily kiosk environment with an overall target ratio of 1 workstation for every ten employees.
- Establish the Copper network as a primarily kiosk environment with a target ratio of 1 workstation for every forty employees.
- Provide the O&S contractor the updated NIMA standard workstation specifications that satisfy GeoScout architecture objectives.

2.1.5.3 Design, develop and deliver workplace improvements as described in the paragraphs above for the following sites:

- Relocate Bethesda Wide Area Network equipment to Maury Hall
- Create Fort Belvoir Bldg 211 communications infrastructure
- Abert Hall Phase 2
- Maury Hall Phase 2

2.1.5.4 For the purposes of evaluation, provide for comparably sized workplace improvement projects, as follows: 1 in FY03, 2 in FY04, and 1 in FY05.

2.2 SYSTEMS INTEGRATION

2.2.1 LEGACY AND HERITAGE NSGI RESPONSIBILITIES

Perform the functions of the NSGI System Integrator for legacy and heritage NSGI systems, responsibilities include: project management involving multiple segments, integration planning, design evaluation, implementation oversight, testing, and delivery coordination of modernized NSGI capabilities. Prioritize in accordance with the NSGI Master Schedule. For reference to current support refer to the document entitled "Statement of Work for the NSGI System Engineering Services Contract: Extracts for GeoScout". Responsibilities include support to the following functions/projects/programs:

- System Integration

- Performance, Modeling and Analysis
- Baseline Control
- System Engineering Analysis and Trades Studies (SEATS)
- NSGI Project Integration Management
- Common Imagery Ground/Surface System (CIGSS)
- NIMA Imagery Exploitation System (NIES)
- Office of Americas
- Mapping Charting & Geodesy Imagery Flow (MCGIF)
- Washington Area Library Architecture Imagery (WALA-IA)
- Enhanced Imagery System
- Future Imagery Architecture
- System Transition
- Specialty Engineering
- Management Systems
    - Information Management Solutions Integration
    - Imagery Exploitation Support System (IESS)
    - National Exploitation System (NES)
    - Requirements Management System (RMS)
    - Production Management Alternate Architecture (PMAA)
- Exploitation Systems
    - Front – End Processing Environment (FPE)
    - Geospatial Operations Branch (GOB)
    - Integrated Exploitation Capability (IEC)
    - Joint Targeting Workstation (JTW)
    - Aeronautical Migration Systems (AMS)
    - Exploitation Tools (MATRIX, MET, CASS)
    - Target Management Systems (TMS/MIDB)
- Dissemination Systems
    - Information Dissemination Services (IDS)
    - Information Access Services (IAS)
    - Web-Based Access and Retrieval Prototype (WARP)
- Storage Systems
    - NIMA Library
    - Image Product Library (IPL)
    - Mapping Charting & Geodesy Image Library (MC&GIL)
    - Digital Products Data Warehouse (DPDW)
- Training and Doctrine Systems
    - SIRIUS
- Integration Checkout and Test
    - System Test and Verification
- NIMA Enterprise Transformation (NIMA/ET) Office Support
    - Information Service Support
    - NIMA Enterprise Workforce System (NEWS) Support
    - SCI Network Consolidation

  - Imagery Data Exploitation (IDEX) System II Deactivation & Hardware Replacement
  - Remote Replication Systems (RRS)
  - Digital Capture and Finishing Environment (DCAFE) Support
- Commercial Imagery Program Office
- US Space Command (USSPACECOM)
- 480th IG

Define, develop, and initiate a system requirements management process that seamlessly interfaces with the Enterprise Engineer's requirements management process.

Manage, when approved by the Government, an orderly transition from the existing NIMA Systems Engineering Support (NSES) development contract for NSGI segments to the GeoScout contract without impact to NIMA mission operations and established NIMA Master Schedule capability delivery dates. The plan for transitioning from NSES to GeoScout shall include Segment/Project Integration, International Office Support, and engineering and system integration support to the Commands.

2.2.2 Establish the System View of the Architecture

Update and complete the NEA Description of the system view of the architecture developed as part of the NEA Study contract (NEA Description). As the Enterprise Engineer changes the technical architecture and operational architecture, modify the systems architecture as appropriate.

2.2.3 Establish the Enterprise Transition Plan

Update and complete the NEA Transition Plan developed as part of the NEA Study. All aspects of NIMA's transformation from the current as-is system view of the architecture to the to-be system view of the architecture should be addressed. Include a plan for the migration of all necessary heritage and legacy systems into GeoScout NSGI system view of the architecture, to include a plan for data migration. The NSGI System Transition Plan should include the satisfaction of the Future Imagery Architecture (FIA) requirements.

2.2.4 Establish Business Case and Implementation Plans for Block I and II

2.2.4.1 The GeoScout Contractor shall provide a comprehensive Business Case for Blocks I and II, detailing the cost and benefits, or value of that proposed block. The block level business case shall include:

i. A performance-based, risk-adjusted analysis of benefits and costs for the proposed block capability effectivity.
ii. The foundation for comparing the baseline benefits and costs with the proposed performance objectives.

2.2.4.2 Upon adjudication and approval of that block business case, the Government will update the enterprise business case using the approved block Business Case as input.

2.2.4.3 For Block I capabilities, provide to the Government NLT 90 days after contract award, the proposed NSGI System Transition Plan and the initial Block's Business Case and Implementation Plan. The Implementation Plan shall include, at a minimum, a description of the changes/additions to capabilities, business processes and architecture introduced by the block, recommended objective and threshold performance parameters, and the schedule. The Block shall be described in terms of the spirals contained within it.

2.2.4.4 For Block II capabilities, provide for review the Government the Preliminary Business Case and Implementation Plan 90 days prior to the beginning of Block II. The final Block II Business Case and Implementation Plan shall be due to the Government 45 days prior to the start of Block II.

2.2.4.5 The Government will review and approve all contractors' Business Cases and Implementation Plans and issue Task Orders to proceed.

2.2.4.6 Deliver the system and technical data as provided in the approved implementation plan (to include schedule).

2.2.4.7 All block definitions shall be defined in accordance with the Under Secretary of Defense for Acquisition, Technology, and Logistics Memorandum dated 12 April 2002, Appendix A.

2.2.4.8 Define the thresholds and objectives for each defined capability.

2.3 ARCHITECTURE

2.3.1 NIMA PRE-PRODUCTION ENVIRONMENT (NPE)

2.3.1.1 TLOS delivered to NPE – deliver TLOS capabilities developed under the NIMA Enterprise Architecture Contract to the NPE as the first instantiation.

2.3.1.2 Identify, develop and deliver interfaces from the NPE to key NSGI systems, segments, and networks consistent with the respective security risk assessments and security certification and accreditation.

2.3.1.3 Develop and implement a plan to accept GIAT and other planned deliveries to the NPE in support of the continuous technical insertion process.

2.3.1.4 Develop Commercial Imagery storage and dissemination prototype.

2.3.1.5 Integrate Geospatial Intelligence Data Integration (GIDI) functionality into the NPE.

2.3.2 PORTAL/WEB ACCESS

2.3.2.1. Design, develop, and deliver a portal for NIMA and NSGI that establishes capabilities to store, discover and retrieve NIMA products, data and information including non-specification data sets. The portal will be NIMA's homepage and should also provide access to corporate information and applications. Output from the portal should be primarily disseminated electronically with an option to output on demand to hardcopy or physical media (DVD, etc.).

2.3.2.2 Design, develop and implement a global metadata catalog allowing seamless data query, on-line access, and retrieval to the following:

i.) NIMA and NSGI Data Stores: NIMA Libraries (NIL, CIL, MCGIL, IPL), DPDW, NGSS, GIDI/FLDB, NES/NACDF, WARP, NIMA GATEWAY, HARD COPY CATALOG, IESS, ICMAP, TMS, AMS, Country Databases, RMS Collection Requirements Database, Voyager Catalogue System, Master Target Database (new), Commercial Imagery vendors, Commercial Data vendors, and web information storage.

ii.) Data Types: National Imagery, Commercial Imagery, Airborne (Motion and Still), Geospatial Intelligence; at a minimum.

iii.) Innovative tailored Geospatial Intelligence Products generated to support unique customer requirements.

2.3.2.3 Portal Access should be provided for all security-levels (unclassified through SCI), and associated communication networks.

2.3.2.4 Include an ICMAP broker.

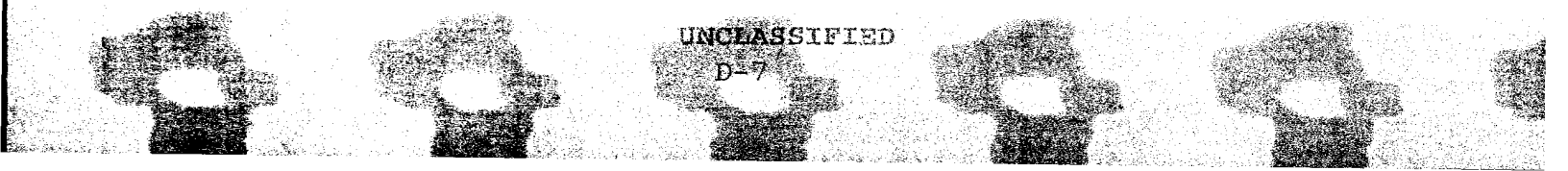
2.3.2.5 The Global Catalog should be able to use geographic features in order to define search areas (airborne mission tracks, roads, etc.)

2.3.4.6 The portal should be designed to allow for the incorporation of new data types and formats over time (Approximately seven new formats per year).

2.3.3 DATA-CENTRIC ARCHITECTURE

2.3.3.1 Develop a strategy, implementation plan, and process for migrating legacy/heritage metadata to the Global Catalog so that it is consistent with the Enterprise Data Model.

2.3.3.2 Incorporate the GIDI functionality, consistent with the GeoScout Geospatial Intelligence database, to include all country databases, the MC&G data base, the nautical database maintenance environment, and the aeronautical database maintenance environment.



2.3.3.3 Design and deliver a capability to store and disseminate commercial imagery. This shall include a warehouse/library for storing the imagery and NIMA products derived from commercial imagery, a capability for discovery by NSGI users that is integrated with the portal, and a mechanism for distributing the imagery to NIMA and its customers. The plan for the migration of current holdings to this new storage capability shall be addressed in the data migration plan.

2.3.4 Mission and Corporate Collaboration

Design and implement a collaboration capability, to include the necessary network infrastructure, tools, and processes, to support NIMA's mission and corporate environments. This collaboration must address users within NIMA as well as between NIMA, its customers, and mission partners. At a minimum, these capabilities should include those TLOS capabilities delivered under the NEA Contract at the contractor's site. Collaboration tools and packages should be accessible via the portal.

2.3.5 Integrated Geospatial Intelligence Analytical Environment

Deliver an initial operational capability for an integrated Geospatial Intelligence analytical environment into production that is based on the TLOS in the NPE. This environment shall fully integrate the exploitation, and storage of, and access to, Geospatial Intelligence information.

2.3.5.1 Establish an all-digital exploitation environment in order to:

2.3.5.1.1 Provide capability to integrate, manipulate, and analyze all sources of data/information to address an intelligence problem

2.3.5.1.2 Perform historical, temporal, predictive analysis on a particular issue or specific location

2.3.5.1.3 Provide a data environment that conforms to appropriate standards and formats and is compatible with off-the-shelf technology where available

2.3.5.1.4 Provide a data environment that is dynamic, allows for easy and fast implementation of new hardware, software applications and software releases with minimal operational impacts

2.3.5.2 Deliver an architecture that is data-centric in order to:

2.3.5.2.1 Provide quick and easy access to data regardless of where it's stored, to include multi-source, multi-INT, reference information, historical information found throughout DoD and the IC.

2.3.5.2.2 Provide a common, intuitive Geospatial Intelligence database(s), such as the GIS GIDI data model, that can be created and maintained by the users

2.3.5.2.3 Provide easy and timely capability to locate/capture/tag objects and save them to a GIS database for easy query/retrieval and multiple subsequent uses, to include graphical reporting and more

2.3.5.2.4 Incorporate datasets form multiple databases (e.g., NES, MIDB, RMS, Web-SAFE) into the Geospatial Intelligence database

2.3.5.2.5 Provide the ability for external partners to feed into NIMA GIS databases for federated GI production (burden sharing)

2.3.5.3 Provide tools that enable collaboration between analysts within and outside of NIMA in order to:

2.3.5.3.1 Provide capability within the analyst's work environment to produce and disseminate a variety of traditional and tailored products at multiple levels of security, to include the ability to store working copies prior to completion and release

2.3.5.3.2 Provide easy and timely capability to archive traditional and tailored products and to easily and quickly query/retrieve them

2.3.5.3.3 Provide collaboration tools for internal and external analytical coordination and exchanges, on each Analyst's workstation

2.3.5.3.4 Provide customer access to our data and products

2.3.5.4 Develop an "integrated" workstation environment where analysts can intuitively bring a variety of tools and sources to bear against an intelligence problem in order to:

2.3.5.4.1 Provide easy and timely access to NTM, commercial and airborne imagery

2.3.5.4.2 Provide easy and timely access to digital geospatial data, to include Gateway, Country databases, commodity data, and contractor-derived data

2.3.5.4.3 Provide easy and timely access to reference information: SIGINT/ELINT, Open Sources, MASINT, HUMINT, Weather, Periodicals, encyclopedias, hand-held photographs, and electronic target folders

2.3.5.4.4 Provide easy and timely softcopy access to Spectral imagery

2.3.5.4.5 Provide easy and timely access to historical imagery of a point or area of interest for comprehensive research

2.3.5.5 Recommend and help document refined business processes, practices, and rules in order to:

2.3.5.5.1 Streamline reporting processes and workflow management

2.3.5.5.2 Minimize operational impacts while adding new capabilities

2.3.5.5.3 Develop systems and processes that support 24x7 production operations

3.0 BLOCK II SPECIFIC CAPABILITIES

3.1 INFORMATION MANAGEMENT

Design, develop, and deliver a robust, integrated information management capability for NSGI that provides the ordering, entry, and tracking of Geospatial Intelligence information needs as well as the production workflow management within NSGI, including the outsourcing of production. It will be supported by and built upon the streamlined, integrated web-based access and collaboration capabilities developed in Block I. It will effectively integrate with the appropriate processes, systems and data of the heritage systems. It will provide modern, integrated, commercial, enterprise-level suites of capabilities associated with supply chain management, customer relationship management, and enterprise resource management. This will replace or consolidate the associated legacy and heritage segments (IESS, NES, RMS, PMAA, STATT and SA/S) in time to support the FIA IOC 2. Specific capabilities include:

3.1.1 Information discovery. Provide the users total asset visibility into present and planned Geospatial Intelligence data holdings

3.1.2 Information Needs. Provide user-friendly, intuitive interface for users to enter Geospatial Intelligence information needs into the NIMA NSGI program. If queries are not satisfied, then a task will be automatically generated to cause collection or exploitation.

3.1.3 Determination and review of collection feasibility for all sources (NTM, commercial, airborne, hydrographic, G&G, and MASINT)

3.1.4 Validation of information needs. Provide the capability to receive, review, record and track authorized validated user requirements.

3.1.5 Requirements approval, prioritization and assignment. Provide the capability to track approval and prioritization of requirements, as well as to support assignment of requirements to NSGI assets. Support flexible approval processes.

3.1.6 Requirements status and history. Provide the capability for users to obtain status and track registered information needs and related collection requirements and production tasks.

3.1.7 Definition and assignment of workflow tasks and activities

3.1.8 Support the collection and analysis of performance metrics of the tasking, production, exploitation and dissemination activities associated with satisfying information needs.

3.1.9 Integrated (from a single desktop) tasking capabilities for NTM, airborne and commercial sources and providers.

3.1.10 A robust interface to ICMAP

3.1.11 A Master Target Data Base, providing one geospatially-defined database source for all target description

3.1.12 GIS-supported functionality, including the capability to support target polygons for search

3.1.13 Knowledge management for multi-media reporting that includes annotated graphics and structured reports, supporting automated release, re-use and repurposing of information to customers

3.1.14 Improved analyst tools

3.1.15 Integrated, consolidated history of collection for all collectors, accessible with a single query at the desktop.

APPENDIX E -- GEOSCOUT CONTRACT WORK BREAKDOWN STRUCTURE (CWBS)

WBS Number	WBS Description
1	**Program Management**
1.1	**Management Direction**
1.2	**Planning, Schedule Management, and Control**
1.3	**Cost and Performance Management**
1.3.1	Earned Value Management
1.3.2	Financial Management
1.3.3	Life Cycle Cost Estimate
1.4	**Contract, Subcontract, and Procurement Administration**
1.5	**Configuration Management**
1.6	**Integrated Digital Environment**
1.7	**Quality Assurance**
1.8	**Security Management**
2	**Systems Engineering**
2.1	**Systems Engineering Management**
2.2	**Requirements Analysis and Allocation**
2.3	**Architecture Analysis and Design**
2.3.1	Architecture Analysis and Design
2.3.2	Logical & Physical Data Model
2.3.3	Interface Definition
2.4	**Systems Analysis and Control**
2.4.1	Performance Analysis, Modeling and Simulation
2.4.2	Metrics Development, Analysis and Reporting
2.4.3	Business Case Development
2.5	**System Migration and Transition Planning**
2.6	**Security Engineering**
2.6.1	Security Architecture Analysis and Design
2.6.2	Security Architecture Certification, Accreditation and Testing
2.7	**Business Process Reengineering**
2.8	**Risk Management**
2.9	**Technology Insertion and NSGI Pre-Production Environment (NPE)**
2.9.1	NSGI Pre-Production Environment
2.9.2	Technology Insertion Analysis
2.10	**Facility Planning and Engineering**
2.11	**Integrated Logistics Support**
2.11.1	Training
2.11.2	Other ILS
2.12	**Special Studies**
3	**System Level Test and Evaluation**
3.1	**Developmental Testing**
3.1.1	System Test Planning
3.1.2	System Test Conduct
3.1.3	System Test Analysis
3.1.4	Developmental Testing Rework
3.2	**Operational Testing**
3.2.1	System Test Planning

WBS Number	WBS Description
3.2.2	System Test Conduct
3.2.3	System Test Analysis
3.2.4	Operational Testing Rework
4	**System Integration**
4.1	**Integration Management and Planning**
4.2	**Integration Conduct**
4.3	**Integration Analysis**
4.4	**Integration Test Facility**
4.5	**Support to IV&V**
4.6	**Systems Integration Rework**
5	**Block 1 Design and Implementation**
5.1	**Management, Planning and Control**
5.2	**Systems Engineering**
5.3	**Spiral Implementation**
5.3.1	Development
5.3.2	Unit and Component Test and Integration
5.3.5	Spiral Rework
5.4	**Support**
5.4.1	Training
5.4.2	Software Maintenance
5.4.2.1	COTS Software Upgrades / New Releases
5.4.2.2	Developed Software Maintenance
6, 7...N	**Blocks 2, 3,..N**