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NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY

National System for Geospatial Intelligence

STATEMENT OF WORK

For the

GeoScout

MODERNIZATION CONTRACT
For Architecture and Infrastructure Modernization

Attachment 1

DATE 22 June 09

Revision 6

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APPROVED FOR
RELEASE DATE:
15-Apr-2010

Change Log

Revision 1, dated 14 September 2006

This Statement of Work is a re-issue in order to reflect the significant baseline changes to the GeoScout contract. These changes include the adoption of the contract to a requirements-based scope from the original capabilities-based approach and the establishment of an independent System Integrator organization. The compliance documents and guidance documents lists have been revised to reflect the driving specifications and the appropriate security directives.

Revision 2, dated 6 April 2007

This Statement of Work is a re-issue in order to reflect the update in language in Section 4.3.1.2, Earned Value Management. This clarification was added as a result of the EVM Clause clarification added to MOD 66. The Contract Clause for EVM, H.23 Earned Value Management (SEPT 2002) and in the SOW should communicate the same message to the contractor.

Revision 3, dated 11 May 2007

This Statement of Work is a re-issue in order to reflect the update in language in Section 3.5.1, Block Design and Implementation for the GVS effort.

Revision 4, dated 30 July 2007

The Sponsor's Statement of Work (SOW) entitled GeoScout Modernization Contract For Architecture and Infrastructure Modernization, Revision 4 dated 30 July 2007, which is attached hereto and made a part of this contract. Please note that this SOW is reflective of all CLINs under the GeoScout contract with the exception of the Legacy Heritage CLINs (CLINs 7, 8, 9, and 10) which each have their own SOW found in Attachment 13.

(This revision makes updates to the CDRLs and incorporates the GVS activities into the SOW)

1. Added Paragraph 3.13, PACKAGING, HANDLING, STORAGE AND TRANSPORTATION. This paragraph refers to the delivery of executable and source code.
2. Added Paragraph 5.1 to incorporate GVS CDRLs
3. Section 2.0 update to incorporate the applicable GVS documents
4. Table of Contents. Added paragraph 3.13 and corrected the paragraph numbering of 3.1 through 3.12
5. Contract Data Items. Item 14 of the data items, was updated to change the delivery method from CD and email to posting to the IDE only. Block A for the applicable data items was updated to identify which line items are applicable. Added CDRLS A022-A027 (applicable to CLIN 0005 only)

4. Added Appendix F –GEOINT Visualization Services (GVS) Program Technical Appendix

Revision 5, dated 4 February 2008

The Sponsor's Statement of Work (SOW) entitled GeoScout Modernization Contract For Architecture and Infrastructure Modernization, Revision 5 dated 4 February 2008, which is attached hereto and made a part of this contract. This is a re-issue in order to reflect the update of Legacy Heritage SOWs for CLINs 7, 8, 9, & 10. These SOWs were updated per the negotiations for ECP 125 and are included with contract modification 92 that definitizes ECP 125. Please note that this SOW is reflective of all CLINs under the GeoScout contract with the exception of the Legacy Heritage CLINs (CLINs 7, 8, 9, & 10) which each have their own updated SOW found in Attachment 13 of the conformed contract.

The above paragraph in this change log is the only change per Revision 5 in this SOW.

Revision 6, Dated 22 June 09

Added interoperability demonstration and other exercise support to the SOW in section 3.9.4 to support Empire Challenge.

Table of Contents

1.0	SCOPE	1
2.0	APPLICABLE DOCUMENTS	2
2.1	COMPLIANCE DOCUMENTS	2
2.2	REFERENCE DOCUMENTS.....	5
3.0	TECHNICAL REQUIREMENTS	8
3.1	GENERAL	8
3.2	REQUIREMENTS.....	8
3.3	SYSTEM ARCHITECTURE	8
3.4	INFRASTRUCTURE MODERNIZATION	9
3.5	BLOCK DESIGN AND IMPLEMENTATION	10
3.6	SYSTEM INTEGRATION	13
3.7	RELATIONSHIPS WITH THE GOVERNMENT AND OTHER CONTRACTORS	15
3.8	CORPORATE AND MISSION BUSINESS PROCESS RE-ENGINEERING IMPLEMENTATION... ..	15
3.9	TECHNOLOGY INSERTION AND NGA PRE-PRODUCTION ENVIRONMENT (NPE)	16
3.10	MODELING AND SIMULATION	16
3.11	SYSTEM SUPPORT	17
3.12	PACKAGING, HANDLING, STORAGE, AND TRANSPORTATION (PHS&T).....	17
4.0	PROGRAM MANAGEMENT REQUIREMENTS	18
4.1	PROGRAM MANAGEMENT	18
4.2	CONTRACT WORK BREAKDOWN STRUCTURE (CWBS) AND DICTIONARY	20
4.3	PROGRAM PLANNING, CONTROL, AND REPORTING	20
4.4	LIFE CYCLE COST (LCC) ANALYSIS, AND CONTROL	22
4.5	MANAGEMENT REVIEWS	23
4.6	QUALITY ASSURANCE PROGRAM.....	23
4.7	CONFIGURATION MANAGEMENT (CM) PROGRAM.....	23
4.8	RISK MANAGEMENT PROGRAM	24
4.9	INTEGRATED LOGISTICS SUPPORT.....	24
4.10	TEST AND EVALUATION MANAGEMENT	25
4.11	TRAINING SUPPORT.....	26
4.12	FACILITY CLEARANCE	26
4.13	STANDARDIZATION	26
4.14	SECURITY ENGINEERING.....	26
5.0	DELIVERABLES – SEE APPENDIX B.	28
5.1	THE FOLLOWING GVS DELIVERABLES ARE INCORPORATED INTO THIS SOW BY REFERENCE.	28
APPENDIX A – ACRONYMS AND DEFINITIONS		5-1

APPENDIX B – CDRLS..... 1

APPENDIX E -- GEOSCOU
T CONTRACT WORK BREAKDOWN STRUCTURE
(CWBS) (MUST BE RECONCILED WITH BLOCK 2 WBS DICTIONARY UPDATE)... 1

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**Statement of Work
For
NSG GeoScout Contract**

1.0 SCOPE.

This Statement of Work provides the contractor direction on tasks to be performed for the NSG GeoScout contract.

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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", Jan 1997
4. DoD Instruction 5215.2, "Computer Security Technical Vulnerability Reporting Program," 2 September 1996
5. DoD 5220.22-M, National Industrial Security Program Operating Manual (NISPOM); January 1995; (Change 2, May 1, 2000)
6. DoD 5105.21-M-1, Sensitive Compartmented Information Administrative Security Manual, Defense Intelligence Agency, August 1998
7. DoD 8510.1-M; Department of Defense Information Technology Security Certification and Accreditation Process (DITSCAP); Application Manual; 31 July 2000
8. DoD Directive 4630.8, Compatibility, Integration, and Interoperability of Command, Control, Communications, Computers and Intelligence (C4I) Systems.
9. DoD Intelligence Information System (DoDIIS) Instruction 2000, February 2000.
10. DoD Manual 4120.24-M DoD Standardization Program (DSP) Policy and Procedures, March 2000
11. MIL-STD-1785, System Security Engineering Program Management Requirements
12. diam 50-4, Security of Compartmented Computer Operations (U), 30 Apr 1997
13. DoD Joint Technical Architecture (JTA), Version 6.0, Oct 2003
14. OMB Circular A-130 "Management of Federal Information Resources" Revised (Transmittal Memorandum No. 4) 12 Dec 2005
15. Clinger-Cohen Act (Formerly Information Technology Management Reform Act (ITMRA) or PL.104-106)
16. Government Performance Results Act of 1993
17. Government Paperwork Elimination Act
18. DCID 6/1, "Security Policy for Sensitive Compartmented Information", 23 Dec 2002
19. Director of Central Intelligence Directive (DCID) 6/3, "Protecting Sensitive Compartmented Information Within Information Systems Manual", (DCID 6/3) - Manual, 11 Dec 2003, For Official Use Only
20. DCID 6/4, "Personnel Security Standards and Procedures Governing Eligibility for Access to Sensitive Compartmented Information", 13 Oct 1999
21. DCID 6/6, "security Controls on the Dissemination of Intelligence Information", 20 Jan 2004
22. DCID 6/7, "Intelligence Disclosure Policy", 30 Jun 1998
23. DCID 6/9, "Physical Security Standards for Sensitive Compartmented Information Facilities", 18 Nov 2002

UNCLASSIFIED

24. 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
25. WINDOWS 2000 Security Checklist, 8 Jan 2004
26. “National Security Agency Security Recommendation Guides”,
<http://nsa1.www.conxion.com/>
27. NGA Microsoft Windows 2000 Security configuration Guide 24 Feb 2004
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. NGA 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), 8 Dec 2004
 - c. NI 8010.3R3 Automated Information System Certification and Accreditation (U), 8 December 2003.
 - d. NI 8010.11 NIMA-Controlled Computer Network Connectivity at Contractor and Other Facilities
 - e. NI 8410.1R1 Implementation of Mobile Code (U), 26 Dec 2001
 - f. NI 8420.3 Firewall Policy and Implementation (U), 5 July 2002
 - g. 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
37. NSG Enterprise Capabilities Document (NERC), Version C.
38. National Security Agency (NSA) Guidelines on Wide Area Networks (WAN)
39. NGA Security Classification Guide, May 2004
40. NSG Architecture Compliance Handbook
41. **FGDC-STD-001 Federal Geographic Data Committee (FGDC) Publication, Content Standards for Digital Geospatial Media 8, June 1994**
42. **MIL-STD-2401 DoD Standard Practice, World Geodetic System (WGS), 11 January 1994**
43. **MIL-STD-2500A National Imagery Transmission Format (NITF) Version 2.0 for the National Imagery Transmission Format Standards (NITFS), through Notice 3, 1 Oct 1998, 12 October 1994**

44. MIL-STD-2500B National Imagery Transmission Format Version 2.1 for the National Imagery Transmission Format Standard, through Notice 2, 28 Jan 2003,22 August 1997
45. GeoTrans (Geographic Translator) Software Requirements Specification (SRS), v1.1, 8 March 2006
46. Tier 2)Tier 2 Enterprise Readiness Process, Version 1.1, 16 June 2005
47. NGA Integrated Contract Performance Management (ICPM), RFC N00-0002, 21 November 2002
48. IF300EAA, NIMA/CITO to National IMINT Program Interface Control Document (latest change, 31 Oct 2005),1 November 1995
49. NCMP-C, NGA Configuration Management Plan (NCMP),17 January 2002
50. NI 8955.5R1, NGA Instruction for Preparing NGA Web Pages, 2 May 2003
51. NSG TEMP-A NSG Test and Evaluation Master Plan (TEMP) (Revised by RFC N01-0438, 20 Oct 2005); 20 October 2005 (unpublished)
52. PID-C,NGA Program Implementation Directive (PID) (latest change, 21 Mar 2002),18 October 2001
53. S2030320-I NSG Enterprise Requirements Specification (NERS) (latest change 15 Dec 2005);15 September 2005
54. S2035A, National Imagery Transmission Format Implementation Requirements Document (NITFIRD) (latest change 23 Jun 2005),3 March 1995
55. SEMP-A,NGA Systems Engineering Management Plan (SEMP);
56. MIL-PRF-89020B; Performance Specification Digital Terrain Elevation Data(DTED),23 May 2000
57. MIL-PRF-89034, Performance Specification Digital Point Positioning Data Base (DPPDB),23 March 1999
58. STDI-0001, National Support Data Extensions (SDE) v1.3/CN1 for the National Imagery Transmission Format(NITF), 20 September 2001
59. STDI-0002,The Compendium of Controlled Extensions (CE) for the National Imagery Transmission Format (NITF), v 2.1,16 November 2000
60. TM 8358.1,Datums, Ellipsoids, Grids, and Grid Reference Systems, 20 September 1990
61. TM 8358.2, The Universal Grids: Universal Transverse Mercator (UTM) and Universal Polar Stereographic (UPS), 18 September 1989
62. TR 8350.2, DoD World Geodetic System 1984 - Its Definition and Relationships with Local Geodetic Systems, with Amendment 1, (dated 3 Jan 2000),4 July 1997
63. DoDD 8100.1,"Global Information Grid (GIG) Overarching Policy," 19 September 2002
64. DoD Architecture Framework (DoDAF), Version 1.0 August 30, 2003
65. Net-Centric Operations and Warfare Reference Model
66. DoD IT Standards Registry (DISR)
67. FM 101-5-1/MCRP 5-2A, Army Field Manual (FM)/Marine Corps Reference Publication (MCRP): Operational Terms and Graphics, 30 September 1997
68. IPCG, IMINT Program Classification Guide, v4.0, 6 May 2005
69. TEC-SR-7, Handbook for Transformation of Datums, Projections, Grids and Common Coordinate Systems, January 1996

70. USGS Professional Paper 1395, Map Projections - A Working Manual, reprint 1994 with corrections, reprint 1997 1987

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 8510.1 "DOD Information Technology Security Certification and Accreditation Process" (DITSCAP), July 2000
6. OMB Memorandum 97-02, "Funding Information Systems Investments" (Raines Rules)
7. OMB Memorandum M-97-16, "Information Technology Architectures", 18 June 1997
8. OMB Circular A-94, "Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs," dated 10/29/92 (Revised 01/22/2002)
9. DoD 7041.3, "Economic Analysis for Decision Making", 7 November 1995
10. DoD Directive 3020.26, "Continuity of Operations (COOP) Policy and Planning", 26 May 1995
11. Presidential Decision Directive #67, "Enduring Constitutional Government and Continuity of Government Operations", 21 October 1998
12. DoDI 3020.39, "Integrated Continuity Planning for Defense Intelligence", 3 August 2001
13. NIMA Services Demarcation Transition Plan, 30 August 2002
14. NIMA Corporate Transition Business Plan
15. Joint Vision 2020, June 2000
16. DoD Architecture Framework Version 1.0, October 2001, Draft
17. Report of the Defense Science Board Task Force on NIMA, April 2000
18. NIMA Commission Report, December 2000
19. NIMA Statement of Strategic Intent 2002
20. NIMA NETIPT Final Report, 26 August 2002
21. NIMA Acquisition & Technology Directorate Program (AT) Plan, Part B USIGS Migration Plan (FY02-FY07), 28 September 2001
22. NIMA USIGS Draft ORD KPP Assessment Update, 16 July 2001
23. NSG Operational Requirements Document (NORD) addressing NGA's Programmatic Responsibilities to the National System for Geospatial Intelligence Core Capabilities, DRAFT, 15 June 2002
24. Capstone Requirements Document For the Imagery and Geospatial (IGCRD), 21 September 2000 (JROC Validated)
25. Operational Requirements Document (ORD) for the Future Imagery Architecture (FIA), JROCM-068-98, 11 June 1998

UNCLASSIFIED

26. TPEd Modernization Plan Update (MPU), June 2000
27. USIGS Enterprise Requirements Specification, Version B, 25 July 2000
28. NSG Systems Training Management Plan, December 2001
29. Imagery and Geospatial Community (IGC) 2010 Concept of Operations (CONOPS), May 1999
30. NIMA Advanced Technology Program Plan, 27 March 2000
31. NIMA Commercial Imagery CONOPS, Version 2.0, 3 December 1999 (DRAFT)
32. Statement of Objectives (SOO) for the Future Imagery Architecture (FIA), 29 July 1998
33. Statement of Requirements (SOR) for the Future Imagery Architecture (FIA), 29 July 1998 (with amendments)
34. Systems Operations Concept (SOC) for the Future Imagery Architecture (FIA), 29 July 1998
35. Department of Defense, C4ISR Architecture Framework Version 2.0, 18 December 1997
36. Joint Chiefs of Staff, CJCSI 3170.01B, Requirements Generation System, January 2001
37. Joint Chiefs of Staff, CJCSI 3312.01, Joint Military Intelligence Requirements Certification, 23 February 2001, Draft
38. Joint Chiefs of Staff, CJCSI 6212.01B, Interoperability and Supportability of National Security Systems, and Information Technology Systems, 8 May 2000
39. 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
40. Concept of Operations for the Intelligence Community's Multi-Intelligence Acquisition Program (IC MAP), 22 April 2002, Version 1.0
41. 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
42. Print Vision 2010, NIMA document, dated October 1998
43. Dissemination Vision, NIMA document, dated June 2000

UNCLASSIFIED

44. NIMA Product Support Management Plan (PSMP), 21 March 2002
45. DoD Regulation 7000 14-R, Financial Management Regulations, Volumes 1-15, date varies by volume
46. Air Force Distributed Common Ground System ORD, 28 February 2001, Identification Code CAF 304-96-I
47. Common Imagery Ground/Surface System, Version 2.2, 19 July 2002
48. NGA Enterprise Test and Evaluation Master Plan (TEMP)
49. EIS Technical Engineering and Management Plan
50. NENRID
51. NIMA SEMP
52. NGA Master Schedule
53. NGA O&M Handbook
54. NGA Geospatial Intelligence Classification Guides, Apr 2004/May 2004
55. NRO IMINT Classification Guide, May 2005
56. Executive Order 19258, as amended, Sept 2003
57. NGA Process Improvement Policy and Processes (PIPP) – Tier 1, Rev B, 21 October 2004
- 58. IEPD-0144 Output Functions Applications Software Definitions**
- 59. IF20D08P Defense Dissemination System Enhanced Processing Segment to Receive Segment Interface Control Document (latest change 7 Oct 2005), 12 November 1993**
- 60. IF48100AG Mission Integration and Development (MIND) to Data Provider Element (DPE) Interface Control Document (ICD), 2 November 2005**
- 61. S1011D Coordinates, Definitions, and Notations (latest update 23 Apr 2004), 12 Feb 1982**
- 62. OGC Reference Model, 16 September 2003**
- 63. OpenGIS® Web Coverage Service (WCS) Implementation Specification (Corrigendum), March 31 2006**
- 64. OpenGIS® Web Map Service (WMS) Implementation Specification, 15 March 2006**
- 65. OpenGIS® GML in JPEG 2000 for Geographic Imagery Encoding Specification, 20 January 2006**
- 66. OpenGIS® Web Feature Service (WFS) Implementation Specification, 3 May 2005**
- 67. OpenGIS® Web Map Context Implementation Specification, 3 May 2005**
- 68. OpenGIS® Web Service Common Implementation Specification, 3 May 2005**
- 69. OpenGIS® Geography Markup Language (GML) Encoding Specification, 19 April 2004**
- 70. OpenGIS® Catalogue Service Implementation Specification, 2 August 2004**

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, as documented in the Compliance Documents (2.1) and supporting reference documents (2.2) and per the baseline defined via the NSG GeoScout contract vehicle.

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

3.2 REQUIREMENTS

The NSG System Integrator, under the GeoScout contract, shall develop and provide proposed updates to the GeoScout System Requirements Document (GSRD, CDRL A020) for the approval of NGA to drive the development and implementation of the NSG enterprise (See SOW 3.6). The GSRD updates are driven by changes to the NSG Enterprise Required Capabilities (NERC) Document, Requests for Change (RFC) as directed by NGA, and effectivity changes for the requirements. In response to the GSRD, the GeoScout contractor shall develop and maintain under NGA approval the GeoScout Requirements Set (GRS, CDRL A021). These requirement documents shall drive the development and implementation of the products and services to satisfy the Government's objectives.

3.3 SYSTEM ARCHITECTURE

3.3.1 The GeoScout contractor shall develop and maintain the NSG 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.

3.3.2 The GeoScout contractor shall use the system view of the architecture description to guide, manage, control, and monitor the physical implementations within each proposed release for NSG modernization.

3.3.3 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 Enterprise Conceptual Data Model.

3.3.4 The architecture shall support an integrated Geospatial Intelligence analytical environment characterized by shared access to data and information, integrated Geospatial Intelligence tradecraft, and an enterprise-wide information and workflow management capability.

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

3.3.6 The GeoScout contractor shall implement a Mission Assurance (MA) process and risk mitigation strategy for NGA'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)

3.3.7 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.

3.3.8 The GeoScout contractor shall design and develop NSG databases consistent with the system architecture views, conceptual data model, and relevant standards.

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

3.4 INFRASTRUCTURE MODERNIZATION

3.4.1 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 NGA's Enterprise Information Technology Program, the GeoScout contractor shall first define and deliver improved infrastructure capability as part of Block I. The improved capability shall support current NSG acquisition program execution, mission and corporate legacy/heritage mission operations, and the GeoScout contractor's system view of the architecture.

3.4.2 The GeoScout contractor shall be responsible for the design, development, and integration of upgrades to NGA'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 NSG 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. NGA's transport layer will provide consistent Local Area Network (LAN) connectivity at the approved baselined NGA sites. This change will provide the flexibility for analysts to perform their mission in NGA 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.
- 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.
- 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 NGA CND Office.

3.4.3 The GeoScout contractor shall address infrastructure impacts for each capability within a block delivery.

3.4.4 The GeoScout contractor shall recommend long haul and metropolitan area communications capabilities (i.e., inter-site) using 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.

3.5 BLOCK DESIGN AND IMPLEMENTATION

3.5.1 NGA has embraced an acquisition approach that delivers blocks of operational capabilities using a variety of development methodologies. These methodologies include traditional waterfall developments and as well incremental deliveries of block capabilities. In addition, GeoScout will perform prototyping and other non-block related development.

GeoScout shall maintain the flexibility to perform prototyping and other non-block related development activities to fulfill short-fused requirements, such as the integration of existing web and web-enabled services that may fall outside the current GeoScout business model. To accommodate "agile-like" integration, Programs need to provide GeoScout stakeholders with an

integration or a re-entry plan for prototype and non-block programs or services into the GeoScout model for implementation into the NSG.

3.5.2 The GeoScout contractor shall be responsible for the satisfaction of all requirements in the GeoScout System Requirements Document (GSRD, CDRL A020) as flowed to the GeoScout Requirements Specification (GRS, CDRL A021). Satisfaction includes requirements analysis, decomposition/allocation, development, integration into GeoScout deliveries and NSG, testing, verification and deployment to an agreed upon schedule and cost.

3.5.3 The GeoScout contractor shall prepare proposed changes to the GRS and provided change packages and presentations to the GCCB for government approval. All GRS requirements shall be traced to at least one GSRD parent requirement.

3.5.4 The GeoScout contractor, in coordination with the NGA Program Office, the Enterprise Engineer, and Team E (ITIS) contractors, shall define, design, develop, and deliver blocks of operational capability that incrementally move NGA and the NSG toward realization of the objective Enterprise Architecture. The GeoScout contractor's overall approach shall be documented in the NSG 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 NSG 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 NSG 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)

3.5.5 The Enterprise Architecture drives the content of each block. The blocks, in turn, drive the content of the increments and releases within it. Blocks, increments and releases may be of varying length, and may overlap (i.e., blocks may overlap other blocks, and releases may overlap other releases).

3.5.6 The GeoScout contractor shall maintain the NSG System Transition Plan (CDRL A002) and the Life Cycle Cost Estimate. The NSG System Transition Plan shall address all aspects of NGA's transformation from the current as-is system view of the architecture to the to-be system view of the architecture Legacy Heritage segments. The NSG 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).

3.5.7 As each block is defined, the GeoScout contractor shall incrementally incorporate changes to the NSG System Transition Plan and the Life Cycle Cost Estimate. Updated versions of the NSG 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 NSG Enterprise Architecture (NEA) Study (i.e., the NEA Transition Plan, NEA CDRL 20 and NEA Life Cycle Cost Estimate, NEA CDRL 17).

3.5.8 The NSG System Transition Plan shall be consistent with the system requirements in the driving requirement specifications, the system integration and program management responsibilities contained in Statement of Work (SOW) Sections 3 and 4 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 provide traceability of the system view and delivered capabilities to the Government's prioritized corporate and mission needs. (CDRL A002)

3.5.9 NGA management will use the GeoScout contractor's Business Case, Life Cycle Cost Estimate, and NSG 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)

3.5.10 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 NSG 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 GIG capabilities
- Projection of the life cycle costs for the proposed block of capability.

3.5.11 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 NGA Master Schedule, and minimize interruption to mission operations.

3.5.12 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

UNCLASSIFIED

information when presented to NGA's external oversight and Congressional Staff to secure approval and funding for new requirements and capabilities.

3.5.13 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 releases contained within it. (CDRL A005)

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

3.5.15 The GeoScout contractor shall be responsible for the development, technology insertion, integration, testing, and delivery of NSG systems and associated technical data consistent with their system view of the architecture, the approved NSG 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)

3.6 SYSTEM INTEGRATION

3.6.1 The GeoScout contractor shall perform as the NSG System Integrator (SI) in support of newly developed mission and corporate systems. NSG SI responsibilities shall include, enterprise system integration, integrated systems planning, architecture trades and assessments, system performance and analysis, requirements management, change management, integration and transition, infrastructure integration and NSG segments and architecture elements system integration. The SI will operate independently of the GeoScout developer such that unbiased technical opinions are rendered to the government. As appropriate, the SI will ensure that all organizational conflicts of interest are mitigated. For existing NSG capabilities, the SI shall have responsibility for integrating system changes developed and delivered under NGA's current legacy and heritage contracts. This support shall continue until the existing legacy and heritage contracts are concluded. SI responsibilities include system requirements analysis, interface analysis and control, segment design and development oversight and evaluation, integration, and test and transition support

3.6.2 The GeoScout contractor shall implement capabilities to satisfy the modernization and transformation of NGA as defined by the 10 precepts of the NETIPT Final Report, consistent with the Contract Master Schedule, Corporate Transformation Business Plan, the NGA Statement of Strategic Intent, and DoD and IC oversight guidance. The NSG SI shall provide system integration support to the implementation of these capabilities.

3.6.3 The NSG SI shall provide system integration support to the integration of legacy and heritage data and information into the architecture.

3.6.4 The NSG SI shall provide an enterprise wide view of the schedule across GeoScout development efforts as well as ongoing L/H development and mission partner schedules to support schedule risk/opportunity assessment and identification.

3.6.5 The NSG SI 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.

3.6.6 The NSG SI shall define, develop, and implement a system requirements process that is consistent and aligned with the Enterprise Engineer's requirements management process.

3.6.7 The NSG SI shall, at the request of the government, perform architectural trades and studies. When specified, a formal study report (A019) shall be submitted at the conclusion of the study.

3.6.8 The NSG SI shall provide enterprise security engineering services, to include assistance with NGA Certification and Accreditation Process.

3.6.9 The NSG SI shall provide system integration support to NGA Legacy Heritage projects and deployments as specified by the government.

3.6.10 The NSG SI shall provide systems integration support to newly emerging projects, technology insertions, and other initiatives as directed by the government.

3.6.11 The NSG SI shall develop, implement and maintain an Organizational Conflict of Interest mitigation plan.

3.6.12 The NSG SI shall provide a monthly Systems Integration Management Review. The content and agenda for this review will be determined in collaboration with the Government Program Office.

3.6.13 The NSG SI shall provide, at the direction of the government and as permitted by the GeoScout contract, support to external government agencies, commercial entities, and foreign governments.

3.6.14 The NSG SI shall perform Architecture Integration and in support of the function of Architecture Integration activities performed by the GeoScout developer.

3.6.15 The NSG SI shall coordinate and oversee the development of the plans for the migration of legacy and heritage systems into the NSG architecture.

3.6.16 The NSG SI shall perform project management, leadership, coordination and planning for current and upcoming NGA Effectivities in conjunction with NGA/AS, external sites, NGA Test Organization (NTO), and the segment contractors.

3.6.17 The NSG SI shall provide an independent assessment of system readiness as part of the NGA Readiness Review Team (RRT) for both Legacy/heritage and GeoScout readiness events.

3.6.18 The NSG SI shall perform technology and standards forecasting in support of enterprise architecture planning activities.

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

3.7 RELATIONSHIPS WITH THE GOVERNMENT AND OTHER CONTRACTORS

3.7.1 The GeoScout contractor maintains an updated set of plans and processes for interfacing with the Enterprise Engineer. (CDRL A006)

3.7.2 The GeoScout contractor shall maintain an updated set of plans and processes for interfacing with the existing O&S contractors, including NGA Team E. (CDRL A006)

3.7.3 The NSG SI shall maintain 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 NSG system with minimal interruption to current mission operations. (CDRL A006)

3.7.4 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.

3.8 CORPORATE AND MISSION BUSINESS PROCESS RE-ENGINEERING IMPLEMENTATION

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

3.8.2 The NSG SI shall, in coordination with the Enterprise Engineer and O&S contractors, work with NSG 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.

3.8.3 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 NSG System Transition Plan shall clearly identify and describe relevant BPR implementation activities for that block/spiral. (CDRL A002, CDRL A005)

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

3.8.5 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.

3.9 TECHNOLOGY INSERTION AND NGA PRE-PRODUCTION ENVIRONMENT (NPE)

3.9.1 The GeoScout contractor shall establish, sustain, and manage an NPE to provide a systematic, proactive approach to identifying, developing, testing, and inserting commercial, academic and government technologies into the NSG system view of the architecture. The NPE shall support user engagement and involvement to support assessment and evaluation of new GeoScout capabilities. The NPE elements shall be located in the production environment, but will be initially decoupled from the NGA-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.

3.9.2 The NSG SI 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.

3.9.3.1 The GeoScout contractor shall continuously integrate successful NPE technology insertion capabilities into the NSG upon Government approval. The NPE shall, at a minimum, support a one-shift production operation, with the ability to surge to 24/7.

3.9.4 The GeoScout contractor shall support Intelligence Community (IC) and Department of Defense (DoD) interoperability demonstrations and technology demonstrations such as Empire Challenge and other events deemed necessary by NGA.

3.10 MODELING AND SIMULATION

3.10.1 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 requirements driving performance. 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.

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

3.10.3 The GeoScout contractor shall coordinate the scope and the results of all modeling and simulation development activities with the Enterprise Engineering contractor and the ITIS contractors.

3.10.4 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.

3.11 SYSTEM SUPPORT

The GeoScout contractor shall maintain the NSG system hardware and software development baseline. The GeoScout contractor shall provide updates and changes to the NSG operational hardware and software baseline via the NSG system Configuration Management (CM) process. The GeoScout baseline is considered to be cumulative, that is, each delivery builds upon the preexisting GeoScout baseline and the resultant baseline becomes the GeoScout baseline of record. The GeoScout contractor is responsible for sustainment of this evolving baseline throughout the GeoScout contract Period of Performance (PoP). The Team E contractor installs operational baseline updates as provided by the GeoScout contractor, with the support of the GeoScout contractor, as required. The GeoScout contractor shall provide the following support:

3.11.1 Sustainment of every element of the cumulative GeoScout baseline until it is successfully transitioned to NGA/E (Team E) for O&S, or through the PoP

3.11.2 Two (2) years of commercial hardware and software support from the date of successful PSR, for every element transitioned to NGA/E (Team E). For those elements transitioned to NGA/E, where all, or a portion of the two (2) years of support beyond successful OTR, falls outside the Period of Performance (PoP), the support shall be costed and procured prior to the end of the PoP.

3.11.3 Sustainment of the developmental portion of the GeoScout baseline through the PoP.

3.11.4 The installation of new versions of COTS software packages, regression testing of GeoScout baseline, and reintegration of the baseline, as required; when new versions of the COTS software packages included in the GeoScout baseline are released by their respective software vendors.

3.12 PACKAGING, HANDLING, STORAGE, AND TRANSPORTATION (PHS&T)

3.12.1 SOFTWARE DELIVERY

3.12.1.1 The Contractor shall, at the request of the government deliver self extracting executable code to the COR or to a COR-approved distribution list (Deliverable A024).

3.12.1.2. The Contractor shall, at the request of the COR, deliver source code to the COR (Deliverables A027).

3.12.1.3. The Contractor shall ensure software is labeled and marked with the appropriate classification and release markings, whether delivered electronically or by hard copy media.

3.12.1.4. Software releasable to foreign partner nations may be required after approval by government, in accordance with and meeting security requirements for releasable data/information.

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 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. The PMP will be implemented by contractor developed Standard Operating Procedures that appropriately support NGA Tier 1 processes documented in the NGA Process Improvement Policy and Processes (PIPP) (ref Section 2.2). Note that some NGA processes only apply to NGA offices (e.g. Pre-Award and Contract Management, Process Definition, Process Improvement, Project Management). NGA Tier 2 processes, as they are developed and approved by NGA SEP-A will be considered for reference as the GeoScout contractor maintains their SOPs.

4.1.3 The GeoScout contractor shall maintain 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.

4.1.4 The GeoScout contractor shall describe in the PMP their support to the NGA Program Manager in the development, implementation, operations and maintenance of the NSG.

4.1.5 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.

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

4.1.7 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);
- NGANet Access

4.1.8 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 via the IDE 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.

4.1.11 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 develop, implement and maintain a network and infrastructure at various classification levels as required to execute the requirements of the GeoScout contract.

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 contractor shall conduct monthly Business Management Reviews. The content of each review will be determined in collaboration with the GeoScout Government Program Office. As requested by the government, the contractor shall provide technical reviews of various developmental and systems integration activities.

4.1.15 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. 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 NGA'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 NSG. 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 level of reporting shall be as directed by the Government Program Management Office. There are scenarios where EVM is not needed by a specific CLIN and/or ECP. EVM data will be provided as directed by the Contracting Officer. At this point, EVM data is not required for the Legacy Heritage CLINS 7, 8, 9, and 10. 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, IBRs will be conducted as soon as practical after work planning has been completed and as mutually agreed to by the GeoScout contractor and the Government. IBRs shall 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.

4.3.4 Intelligence Capability Baseline Description (ICBD). The GeoScout contractor shall support the Government Program Office in updating the Intelligence Capability Baseline Description (ICBD) for all Blocks annually. It is anticipated that out of cycle updates to the Block ICBDs may be required to capture significant program changes. Inputs will be required for the following ICBD sections:

- 4.3.4.1 Technical baseline description (i.e. requirements, interfaces, performance characteristics, etc)
- 4.3.4.2 Bill of Materials and ICBN Related Hardware/COTS/ & Custom Software Spreadsheets
- 4.3.4.3 Program Risks
- 4.3.4.4 Test and Security Plans
- 4.3.4.5 Operations and Support Concept
- 4.3.4.6 Development Schedules
- 4.3.4.7 Facilities Requirements

The GeoScout contractor shall also provide access to Subject Matter Experts (i.e. SI, SE, PM, S/W Developers, Test, O&S, etc) for discussion and clarification of cost, technical, schedule, and programmatic areas related to the ICBN updates.

4.3.5 The GeoScout contractor shall support the Government Program Office in collecting cost, schedule, technical, performance, and programmatic data to update the NGA cost database annually. It is also anticipated that updates to the data collection will be done at the end of major releases and increments, as appropriate.

4.3.6 The GeoScout contractor shall support to the Independent Life Cycle Cost Estimate (iLCCE), ECP Evaluation, and IC_CAIG teams. Activities include:

- 4.3.6.1 Providing cost, technical, schedule, and programmatic inputs to the Independent Cost Estimating Spreadsheet for Blocks to be estimated.
- 4.3.6.2 Providing Subject Matter Experts (i.e. SI, SE, PM, S/W Developers, Test, O&S, etc) to discuss cost, technical, schedule, performance, and programmatic matters.

4.3.7 The GeoScout contractor shall support NGA Cost as an Independent Variable (CAIV) activities.

4.3.8 The GeoScout contractor shall update the OMB 300 submissions for all Blocks annually.

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), NSG 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

UNCLASSIFIED

- 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 NGA 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 NGA 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 NGA, the Enterprise Engineering contractor, and the Team E O&S contractor (ITIS). 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. The GeoScout shall use the Risk, Issues, and Opportunities Tool (RIOT) for risk management.

4.8.2 The GeoScout contractor shall interface with the Enterprise Engineer and ITIS contractors on enterprise-level risk issues/matters and shall provide support to the EE chaired Risk Management Core Team.

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. NGA currently employs separate Operations and Sustainment (O&S) Contractors, and the GeoScout PSMP shall address the responsibility of O&S Contractors. This plan shall describe the methodology for the exchange of information and transition from the GeoScout development phase to the O&S phase managed by Team E (ITIS contractor).). It shall provide an overview of the NSGI System Transition Plan, GeoScout CDRL A002.

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 NSG 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 NGA'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 GeoScout contractor shall support government 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

UNCLASSIFIED

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 NSG systems in coordination with the NGA 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 6/9, "Physical Security Standards for Sensitive Compartmented Information Facilities," 18 Nov 2002 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). While there is no similar template in the Intelligence Community, the Director of National Intelligence (DNI) and the Director of Central Intelligence (DCI) require

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SCI be protected in accordance with DCID 6/4 and DCID 6/6. The purpose of the PPP is to protect defense items and technical data and intelligence information, sources and methods 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). NGA Policy Notice (PN) 5210.3R2, "Classification Guides by Program", 24 Nov 2003 and DoD 5200.1-R "Information Security Policy Regulation" (April 20, 1995) requires a SCG for all classified systems, programs, plans, or projects. The GeoScout contractor shall develop the SCG (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 be flexible yet specific enough to address the relevant DoD acquisition program requirements as well as provide for the protection of intelligence information, sources, methods and systems under the purview and oversight of the DNI and DCI. As the Block Implementation Plan (CDRL A005) is developed over the course of the contract, the PPP should be updated with the appropriate level of detail for the evolutionary blocks, and spirals within blocks, which the contractor will deliver. The PPP shall address the use of engineering measures to protect the system physically, or to limit actions, which compromise it's war-fighting or support capabilities.

4.14.2 SECURITY ARCHITECTURE AND DESIGN

4.14.2.1 NSG Enterprise Security Architecture

The GeoScout contractor shall develop and maintain the NSG 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 NGA are subject to certification and accreditation. GeoScout AIS processing collateral or Sensitive Compartmented Information (SCI) information in NGA, or contractor facilities, shall be accredited by NGA 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 National Industrial Security Program Operating Manual (NISPOM).

The certification and accreditation (C&A) procedures defined in NIMA Instruction 8010.3R3 Automated Information System Certification and Accreditation, (12 September 2002), 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 NGA 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.

5.1 THE FOLLOWING GVS DELIVERABLES ARE INCORPORATED INTO THIS SOW BY REFERENCE.

- A022 – GVS Programmers Guide
- A023 – GVS Users Guide
- A025 – Release Notes

UNCLASSIFIED

**A026 – Delivery of Software Changes
(A024 and A027 have been referenced in section 3.12 of the SOW)**

APPENDIX A - ACRONYMS AND DEFINITIONS

APPENDIX B – CDRLs

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

UNCLASSIFIED

29

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
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

UNCLASSIFIED

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 NSG Enterprise Architecture

NES National Exploitation Systems

NETIPT NSG Enterprise Transformation Integrated Product Team

NEWS NIMA Enterprise Workforce System

NGA National Geospatial-Intelligence Agency

NGC NIMA Geospatial College

UNCLASSIFIED

NIES	NIMA Imagery Exploitation System
NIMA	National Imagery and Mapping Agency
NISPOM	National Industrial Security Program Operating Manual
NORD	NSG Operational Requirements Document
NPE	NSG Pre-Production Environment
NSA	National Security Agency
NSES	NIMA Systems Engineering Support
NSG	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

UNCLASSIFIED

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.

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 NGA 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.

UNCLASSIFIED

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

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 NSG 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 NSG operations. The infrastructure establishes the common operating environment that supports

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interoperability for exchanging information. Infrastructure resources and services may be provided by organizations outside of NGA and may be shared by the NSG 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 NGA's current disparate operations, processes, and systems into one coherent organization and an NSG that satisfies the NGA mission and the objectives and goals stated herein.

Legacy System. A system that was acquired prior to the formation of NGA 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 (NSG). The integration of technology, policies, mission and corporate capabilities, and doctrine necessary to conduct Geospatial Intelligence in a multi-intelligence environment.

UNCLASSIFIED

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 NGA from its current operating state to the GeoScout contractor's system architecture, including the migration of legacy and heritage systems.

UNCLASSIFIED

APPENDIX B – CDRLs

CDRL Number	CDRL Title	SOW Paragraph
A001	Data Accession List	Paragraph 4.1.13
A002	NSG 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
A019	Studies Report	Section 2.2.5
A020	GeoScout Systems Requirements Document	Section 3.2
A021	GeoScout Requirements Set	Section 3.2
A022	GVS Programmers Guide	Section 5.1
A023	GVS Users Guide	Section 5.1
A024	Executable Software	Section 5.1
A025	Release Notes	Section 5.1
A026	Delivery of SW Changes	Section 5.1
A027	Source Code	Section 5.1

UNCLASSIFIED

APPENDIX E -- GEOSCOU T CONTRACT WORK BREAKDOWN STRUCTURE (CWBS) (Must be reconciled with Block 2 WBS Dictionary update)

WBS#	Name
0	GeoScout Project
1	Prime Mission Product
1.1	Geospatial Intelligence Operations (GIO)
1.1.1	Information Environment
1.1.2	Federated Access
1.1.3	Geospatial-Intell Visualization Envir
1.1.4	GKB Prototype
1.1.5	Supplier Management
1.1.6	Value Chain Management
1.1.7	Workgroup Management
1.1.8	Data Synchronization
1.1.9	AGP
1.1.A (1.1.10)	Needs Management
1.2	NSGI Functional Management (NFM)
1.3	Core Enterprise Services (CES)
1.3.1	Collaboration
1.3.2	Portal
1.4	NGA Corporate Operations (NCO)
1.4.1	Balanced Scorecard
1.4.2	Customer Interface
1.5	Information Technology Management (ITM)
1.5.1	Data Storage & Management
1.5.2	EPSS
1.5.3	Identity Management
1.5.4	Multi-Level Security
1.5.5	Network Transport Layer
1.5.6	Enterprise Management
1.5.7	Computer Network Defense
1.5.8	Enterprise Service Center
1.X	User Engagement
1.Y	Development Engineering

UNCLASSIFIED

1.Z	Development Management
2	Systems Integration
2.1	Geospatial Intelligence Operations (GIO)
2.2	NSGI Functional Management (NFM)
2.3	Core Enterprise Services (CES)
2.4	NGA Corporate Operations (NCO)
2.5	Information Technology Management (ITM)
2.6	Legacy Heritage Integration
2.6.1	Airborne Sources
2.6.2	Exploitation Systems
2.6.3	Overhead Sources
2.6.4	Integration Support
2.7	Infrastructure Integration
2.8	Enterprise Requirements
2.Z	SI Management
3	Systems Engineering
3.1	Block Planning
3.2	Block Integration and Technical Control
3.3	Transformation Engineering
3.4	Requirements Engineering
3.5	Architecture Integration
3.6	Data Architecture and Engineering
3.7	Modeling, Simulation & Analysis
3.8	System Migration & Transition Planning
3.9	NPE Mgmt
3.10	Eng Process Definition, Maintenance & Review
3.11	Special Studies
3.12	Life Cycle Cost Estimating
3.Z	SE Management
4	System Test & Evaluation
4.1	Verification
4.1.1	Verification Planning
4.1.2	Verification Conduct

UNCLASSIFIED

4.1.3	Verification Analysis
4.2	System Test
4.2.1	System Test Planning
4.2.2	System Test Conduct
4.2.3	System Test Analysis
5	Training
6	Operations / Site Activation
6.1	Integrated Logistics Support (Deleted, covered by 6.4)
6.2	Operations CM
6.3	Operations Support
6.4	Logistics Management
6.5	Deployment
6.6	Certification & Accreditation
6.7	Transition Engineering
7	Sustainment
7.1	GIDI O&S
7.2	Software Maintenance
8	Program Management
8.1	Management Direction
8.2	Program Control
8.3	Financial Management
8.4	Contract, Subcontract and Procurement
8.5	Configuration Management
8.6	Software CM
8.7	Environment Management
8.8	Quality Assurance
8.9	Security Management
8.10	Travel and ODCs
8.11	Cost Estimating
8.12	Process and Tool Training
8.13	GTC Facility Management
8.14	Subcontractor Award Fee
9	Recapitalization

UNCLASSIFIED

10	Reserved (Task Orders)
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UNCLASSIFIED

E-4