

Contract No. HSBP1006D01353

Task Order No. HSBP1207J17845
Attachment One

Attachment One

SBI*net* FY 2007 Design and Deployment Planning Performance Work Statement

1 Purpose

The purpose of this Detailed Project Plan is to describe the technical, engineering and management services to be performed by the Contractor to develop detailed plans for the deployment ("lay-down") of specific *SBlnet* System-of-Systems components and sub-systems ("toolbox") within the three defined geographic/project areas listed below:

1. Tucson [including the Tucson West Environmental Assessment Area (EA Area), the Tucson East EA Area, the Organ Pipe EA Area, and the Organ Pipe EA Area] and projects within the Tucson Sector [currently, Tucson Station I (TUS-1) and Ajo Station I (AJO-1)].
2. Yuma [including the Barry M. Goldwater Range (BMGR) Phase III, and the Cabeza Prieta EA Area].
3. El Paso (including the "Texas Mobile" project area, or El Paso Phase I, and El Paso Phase II, which includes El Paso Station and the New Mexico border area).

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<#>Texas Mobile ¶

2 Background

Achieving operational control of the border of the United States of America (USA) is one of the key mission objectives of the Department of Homeland Security (DHS). Managing, securing, and controlling the border requires determining the optimum mix of personnel, technology, infrastructure, and response platforms to achieve maximum tactical and strategic advantage in each unique border environment, that will significantly reduce the probability of illegal entries and successful cross-border violations into the USA and maintain control of the border. A systematic approach will deploy and integrate systems and services in stages, allowing each stage to build on the success of earlier stages.

In September 2006, U.S. Customs and Border Protection (CBP) awarded an Indefinite Delivery/Indefinite Quantity (IDIQ) contract HSBP1006D01353 to the Contractor for development and implementation of the *SBlnet* border security solution. Subsequent to this award, the government awarded a task order under the *SBlnet* master contract to provide management and systems engineering services necessary to develop the *SBlnet* "System-of-Systems" architecture, framework, and toolkit.

This *SBlnet* Sector Design Task Order requires *SBlnet* engineering design and deployment planning services in accordance with the *SBlnet* System-of-Systems A-level specification, under the *SBlnet* master contract HSBP1006D01353 for the geographical project/areas listed above.

The Contractor has since delivered the *SBlnet* System-of-Systems A-level Specification (A-Spec) to establish the requirements for the *SBlnet* system.

3 Objectives

The six elements described below form the primary mission of the *SBlnet* program and are necessary for DHS and CBP to gain control of the US land borders. Border control means gaining full control of the US borders so illegal immigration as well as security breaches can be prevented. This system, once deployed, will be instrumental in

assisting DHS and CBP in achieving control of the border. Border control is achieved, in a given geographical area, when CBP is able to consistently meet all of the elements listed below in that area.

- a. 'Predict' element - Anticipating an Item of Interest actions prior to illegal activity.
- b. 'Deter' element - To dissuade illegal cross border activity into and out of the US by impeding entry or creating and conveying a certainty of detection and apprehension.
- c. 'Detect' element - To discover a possible Item of Interest.
- d. 'Identify' element - To determine whether an Item of Interest is a conveyance, human, animal, or other.
- e. 'Classify' element - To determine the level of threat or intent of the Item of Interest.
- f. 'Respond/Resolve' element - Employ the appropriate level of law enforcement resources to successfully address an Item of Interest; Final CBP action taken, whether criminally, administratively, or otherwise, of an Item of Interest.

The primary objective of this task order is for the Contractor to apply *SBinet* System-of-Systems design solutions to meet the mission requirements of each geographical/project area through the application of rigorous systems engineering design processes. This objective will be met when the Contractor delivers a "lay-down" design solution for each area/project that enables effective control of the Border, conforming to the *SBinet* A-Level specification and performance criteria.

The "lay-down" design solution, (also known as the "Design Alternative"), shall consist of a minimum of one major set of alternatives with two or more "optional configurations" (also known as "variations of the selected Alternative") to ensure the government's ability to effectively manage environmental and other external stakeholders constraints while minimizing acquisition schedule and cost impacts.

The "lay-down" solution to be developed by the Contractor will include:

- a. The bill-of-materials for technology (surveillance equipment, command and control, communications, vehicles/modifications).
- b. Bill-of-materials for infrastructure (construction components for tool box elements for barriers, roads, fences, required modifications to buildings if required to house COP).
- c. Other toolbox items selected at the systems level.
- d. Set of locations for deploying and/or modifying the technology and infrastructure.
- e. Required upgrades to, and additional communications network assets.
- f. Concept of Operations (including CBP resources required) for employment of the lay-down solution.
- g. Plan of action for deploying the system.
- h. Logistics analysis and projections for sustaining the system.
- i. Project Plan developed by The Contractor for the deployment of the system (completing the lay-down) within the geographical area.

In addition, the lay-down solution will:

- a. Comply with the System of Systems Level A-Spec requirements as allocated to the Block 1 configuration.
- b. Comply with area/project-specific lay-down specifications.
- c. Address the area/project-specific constraints provided to the Contractor during the Project Requirements Review (PRR).
- d. Encompass the necessary technology, communications infrastructure, tactical infrastructure, transportation assets, training assets, necessary services, and recommendations for the optimum deployment of CBP personnel assets.
- e. Include analysis of alternative solution sets and system trade-offs, to include technology, response capabilities (including aviation), additional tactical infrastructure, and personnel.
- f. Minimize total ownership cost to the Government.
- g. Comply with environmental and land use requirements (Appendix A, Paragraph-5.4).

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4 Scope of Work

The work scope described in this task order includes the full range of technical, engineering and management services required to develop detailed plans for the deployment ("lay-down") of specific SBInet System-of-Systems components and sub-systems ("toolbox") within the defined geographic/project areas (Barry M. Goldwater Range (BMGR) Phase III, Yuma, Texas Mobile, Tucson and El Paso). Lay-down design was accomplished under this task order from August 1, 2007, until October 31, 2008, in the Tucson, Yuma and El Paso geographic areas, and efforts from November 1, 2008, until the end of the period of performance are intended to focus within the Tucson geographic area. It encompasses a combination of mission and systems engineering efforts including:

- (a) Requirements management
- (b) Sensor placement optimization
- (c) Trade studies
- (d) Concept of operations revision
- (e) Operations and maintenance planning
- (f) Architecture definition
- (g) Life cycle cost and supportability analysis
- (h) Environmental planning
- (i) Specialty engineering
- (j) Test planning
- (k) Integrated logistics planning
- (l) Facilities analysis

The scope of this task also includes the preparation of a Project Plan to produce, integrate, deploy and test the resulting lay-down design. The work required of this task

order is within the scope of the SBI~~net~~ master contract. Reference Appendix A – SBI~~net~~ Master Contract References.

The Contractor shall deliver services necessary to achieve the objectives of this task order and tasks described in Section 5 below.

4.1 Technical Approach

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To accomplish this scope of work, the technical approach chosen by the Contractor is a Lead Systems Integrator approach. This approach consists of the Contractor led Integrated Product/Project Teams which leverage expertise from its core engineering teams, partners, and teammates. The Contractor IPTs shall accomplish overall system and sector lay-down designs, system integration, environmental planning and management responsibilities. The sub-system engineering, design, integration, and configuration requirements are allocated to selected sub-systems and design integration teammates.

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Each of the subsystem design integration teams shall analyze requirements, develop and integrate subsystem design solutions to include test, verification, and operations & maintenance planning. Specifications, interface requirements, design drawings and documents, and lay-downs will be managed under configuration control to provide necessary and sufficient as-designed configurations for follow-on system acceptance. In addition to allocating work to design integration teams, the Contractor will utilize systems engineering, analysis, and task management support from all SBI~~net~~ teammates to provide functional expertise to the Integrated Product Teams.

5 Detailed Project Plan

Detailed tasks to be performed for each geographical/project area under this task order are mapped to the Performance Work Statement (PWS) of the Request for Proposal for SBI~~net~~ FY2007 Design and Deployment Planning.

To ensure complete and consistent accomplishment of engineering and management tasks for each of the geographic areas/projects, the Contractor levied customer statement of work and necessary derived requirements on integration design teams. Table 5-1, Requirements Allocation Matrix, below shows the mapping of requirements by Project Plan paragraph and Government Work Breakdown Structure (GWBS) to the Integrations Design Teams and respective Supplier Statements of Work (SSOWs).

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In addition to integration design team support, the Contractor has also solicited systems engineering, analysis, and task management support from all SBI~~net~~ teammates to provide functional expertise to the Integrated Product Teams in selected areas. Table 5-2, Engineering, Analyst, and Task Management Support, lists the specific functional skill-set requirements obtained to provide direct support to engineering and management IPTs.

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Table 5-1 Requirements Allocation Matrix

Table 5-1 (1 of 6)

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Table 5-1 (2 of 6)

N.1.3.8.2- Detailed Design	5.3	Detailed Design	3.1 Analytical Integration	X	X	X	X	X
			3.2 Compatibility Assessments	X	X	X	X	X
			3.3 Requirements Analysis	X	X	X	X	X
			3.4 Configuration Design	X	X	X	X	X
			3.5 Ops and Maint Planning	X	X	X	X	X
			3.6 Design Verification Planning	X	X	X	X	X
			3.7 Physical Integration Planning	X	X	X	X	X
			3.8 Test Support Planning	X	X	X	X	X
			3.9 Integrator Communication	X	X	X	X	X
			3.10 Design Reviews & Meeting Support	X	X	X	X	X
			3.11 Component Integration	X	X	X	X	X
			3.12 Project Acceptance Planning Support	X	X	X	X	X
N.8.6 - Legal and Regulatory Compliance	5.4	Environmental Planning Support	X	X	X	X	X	
N.1.3.8 Project Design	5.5	Management of Technical Reviews	X	X	X	X	X	
N.1.3.8.1- Preliminary Design	5.5.1	Deployment Design Review (DDR)	X	X	X	X	X	
N.1.3.8.2- Detailed Design	5.5.2	Deployment Readiness Review (DRR)	X	X	X	X	X	
N.1.3.8 Project Design	5.5.3	Trade Study Reviews	X	X	X	X	X	

Table 5-1 (3 of 6)

GWBS	SOW	SSOWs	11111	11111	11111
N.1.3.8 Project Design	5.6 Stakeholder Briefings	3.10 Design Reviews & Meeting Support	X	X	X
N.8.1.2 Project Coord & Admin Support			X	X	X
N.8.1.3 - Project Offices			X	X	X
N.8.1.2 Project Coord & Admin Support			X	X	X
N.8.1.2 Project Coord & Admin Support	5.7 Task Order Management	3.14 Program Management 3.14.1 Program Communication 3.14.2 Meetings 3.14.4 Configuration Management 3.14.5 Quality Assurance 3.14.6 Cost and Schedule Management 3.14.7 Monthly Reports 3.14.3 Supplier Sub-Tier management	X	X	X
N.1.3.8 Project Design			X	X	X
N.1.3.8 Project Design			X	X	X
N.8.2.1 - Cost & Schedule Management			X	X	X
N.8.2.2 - Contract & Data Management			X	X	X
N.8.3 - Supplier Mgt & Procurement			X	X	X
			X	X	X

Table 5-1 (4 of 6)

N.1.3.8 Project Design	5.1 Trade Studies	3.19 Trade Studies	X
	5.1.1 Solution Sets		
	5.1.2 Infrastructure Deployment		
	5.1.3 Environmental Planning		
N.1.3.8.1- Preliminary Design	5.2 Preliminary Design	3.1 COP Functionality Analyses	X
		3.2 COP Station	X
		3.3 COP Sector	X
		3.3.1 Mobile COP	X
		3.3.2 C3 Support Capability Planning	X
		3.3.3 Intelligence System	X
		3.3.4 Case Management Systems	X
		3.3.5 External Systems Interfaces	X
		3.4 Bandwidth and Network Analyses	X
		3.5 Sensor Integration Planning	X
		3.6 Communications Integration Planning	X
		3.7 Information Technology (IT) Planning	X
		3.8 IT Security Analyses	X
		3.9 Compatibility Assessments	X
		3.10 C2 and IT Configuration Design	X
		3.11 Operations and Maintenance Planning	X
		3.12 Design Verification Planning	X
		3.13 Physical Integration Planning	X
3.14 Test Support Planning	X		
3.15 Communication and Tower Power Integrator Coordination	X		
3.16 Design Reviews and Meeting Support	X		
3.17 Integrated C2 and IT Components	X		
3.18 Project Acceptance Planning Support	X		

Table 5-1 (6 of 6)

N.1.3.8 Project Design	5.5	Management of Technical Reviews	3.16 Design Reviews and Meeting Support	X
N.1.3.8.1- Preliminary Design	5.5.1	Deployment Design Review (DDR)	3.16 Design Reviews and Meeting Support	X
N.1.3.8.2- Detailed Design	5.5.2	Readiness Review (DRR)	3.16 Design Reviews and Meeting Support	X
N.1.3.8 Project Design	5.5.3	Trade Study Reviews	3.16 Design Reviews and Meeting Support	X
N.1.3.8 Project Design				X
N.8.1.2 Project Coord & Admin Support	5.6	Stakeholder Briefings	3.16 Design Reviews and Meeting Support	X
N.8.1.3 - Project Offices			3.20 Program Management	X
N.8.1.2 Project Coord & Admin Support			3.20.1 Program Communication	X
N.8.1.2 Project Coord & Admin Support			3.20.2 Meetings	X
N.1.3.8 Project Design			3.20.4 Configuration/Data Management	X
N.1.3.8 Project Design			3.20.5 Quality Assurance	X
N.8.2.1 - Cost & Schedule Management	5.7	Task Order Management	3.20.6 Cost and Schedule Management	X
N.8.2.2 - Contract & Data Management			3.20.7 Monthly Reports	X
N.8.3 - Supplier Management & Procurement			3.20.3 Supplier Sub-Tier Management	X

Table 5-2 Engineering, Analyst, and Task Management Support

SWBS	SOW	T/M/SSOWs	1	2	3	4	5	6	7	8	9	10	11	12
N.1.3.8 Project Design	5.1 Trade Studies	LCCM Planning and Analysis Support	X											
		Concept of Operations Support	X											
		Organizational Change Management Support												X
		Communications Systems Architecture Support											X	
		Systems Design & Integration Support											X	
		Systems Engineering Support											X	
		Intelligence Analysis Support												
		Systems Analysis and Design Support												
		Business Process Analysis Support												
		Command & Control Architecture Support												
		Information Assurance Support												
		Sensor and Infrastructure Analysis Support												
		Systems Analysis Support												
N.1.3.8.1- Preliminary Design	5.2 Preliminary Design	LCCM Planning and Analysis Support	X											
		Concept of Operations Support	X											
		Organizational Change Management Support												
		Communications Systems Architecture Support												
		Systems Design & Integration Support												
		Systems Engineering Support												
		Intelligence Analysis Support												
		Systems Analysis and Design Support												
		Business Process Analysis Support												
		Command & Control Architecture Support												
		Information Assurance Support												
		Sensor and Infrastructure Analysis Support												
		Systems Analysis Support												

5.1 Trade Studies

The Contractor shall conduct such trade studies as necessary to develop project design alternatives for each geographical area. This analysis shall include a comparison of the alternatives against the A-Spec and the area/project-specific requirements resulting from the Deployment Planning Review (or DPR, formerly known as the Project Requirements Review or PRR) for that area. At the conclusion of a trade studies meeting, the government may choose an alternative.

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The results to be presented by the Contractor at trade study meetings shall include, but not be limited to the following:

- a. Trade study results;
- b. Modeling and analysis results of system effectiveness;
- c. Toolbox availability and compatibility;
- d. Technical performance parameters and alignment with A-Spec;
- e. Logistics supportability analysis;
- f. Life-cycle costs analysis; and
- g. Proposed design alternative(s) with optional configurations.

The trade studies documentation will be provided for review and will follow the Contractor trade study process, including description of alternatives, evaluation criteria, weighting factors, and trade study results. Trade studies driving significant design and architectural decisions will be documented in report format and formally released into the Contractor's CM system. The trade studies will be provided as a part of the read-ahead material for the Deployment Design Review (section 5.5.1) and the Deployment Readiness Review (section 5.5.2) as appropriate.

The alternatives analysis shall include, but not be limited to, the following:

5.1.1 Solution Sets for Deployment into a Geographical Area/Project

For each geographical/project area, the Contractor shall evaluate alternative composite solutions based on a mix of *SBI~~net~~* system component technologies, infrastructure elements, transportation assets and modifications, response assets, legacy equipment, legacy infrastructure, legacy facilities, personnel, and area-specific Concept of Operations (CONOPS). The Contractor may also recommend additional components be added to the *SBI~~net~~* system baseline when the use of these components is in the government's best interest and may be asked to incorporate government furnished designs for tool box elements. These alternatives shall address the performance, life-cycle cost, and environmental impacts of the solution set against the A-Spec and DPR requirements for the specified geographical area. Alternative design(s) shall describe the following "toolbox" items:

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- a. Prime Mission Products: Surveillance technology, command and control, communications, information technology, surveillance platforms, and field agent systems.
- b. Infrastructure Elements: Personnel and vehicle barriers, roads (including improvements and maintenance) for response and transport, surveillance sites including access to sites, command center construction and improvement, air and marine facilities, and communications infrastructure (including sites and access to sites).
- c. Transportation Assets: Additional and improvements to transport vehicles to include ground, air, and marine.
- d. Response Assets: Additional and improvements to response vehicles to include ground, air, and marine.
- e. Legacy Equipment and Planned Upgrades: Use, retrofit, and/or replacement of current surveillance, communication, and command and control technology and equipment to include the legacy Remove Video Surveillance System (RVSS), Intelligent Computer Aided Detection (ICAD), Underground Sensors (UGS); and legacy infrastructure construction.
- f. External Interfaces: Stakeholder systems; state, local, federal and tribal law enforcement agencies.
- g. Personnel: Numbers and capability/seniority levels of CBP operations and support personnel required to perform the mission. This includes personnel from the Office of Field Operations (OFO), Office of Border Patrol, Air and Marine (A&M), and recommended levels of support contractor personnel.
- h. Concept of Operations (CONOPS): Method of asset and personnel deployment, application of surveillance technologies, and use of equipment.

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5.1.2 Infrastructure Deployment within Each Geographical Area/Project

For infrastructure elements recommended for each of the alternatives discussed in 5.1.1(b) The Contractor shall develop deployment and/or site alternatives. These deployment alternatives shall address contingency planning to aid the government in reducing risk related to future land acquisition and to minimize environmental impacts.

5.1.3 Beginning Environmental Planning Early During the Design Process

The Contractor shall provide the government, at the earliest possible date, a list of proposed sites where construction and operations are expected to be conducted, to allow the government to conduct environmental planning. The Contractor shall further hold, at such key points during the design process as the Contractor or the government shall deem necessary, meetings to exchange updated information about the environmental planning activities.

5.2 Preliminary Design

The preliminary Design Process will include the analytical assessment of the sensor lay-down architecture to accomplish the specified probability of detection for the area of interest. CBP personnel shall be consulted in this process to take advantage of first

hand tactical knowledge of the area. Following the analytical definition of sensor assets, the Contractor shall perform sufficient site visits to confirm the suitability of the proposed sites and to identify alternative sites within a reasonable range of the analytically determined optimal locations.

Based on the finalized definition of sensor sites and communications towers, and alternates, the supporting communications, and IT/IM architectures shall be defined to support reliable data transport and availability. Tactical infrastructure (roads, etc) required to support the proposed sensor sites shall be defined. To satisfy the tactical needs of the area, candidate toolbox items consisting of both discrete hardware and integrated assemblies shall be identified. If existing toolbox items are not sufficient, the key functional requirements for additional capability shall be provided for review.

An initial deployment analysis for the area shall be provided identifying a draft deployment schedule and identifying long lead items. Based on the initial lay-down, both a lay-down design completion cost estimate and an initial deployment cost estimate shall be provided. The results of these activities shall be documented and provided as a part of the Deployment Design Review described in section 5.5.1.

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5.3 Detailed Design

The Contractor shall provide a detailed Lay-down design of subsystem and component deployments and detailed interfaces between deployed subsystems and components.

As part of the detailed design effort for each geographical area, the Contractor shall update or complete the following items:

- a. Project level specifications;
- b. Top-level assembly drawings; cross-sections, plans, surveys, hydrology studies, specifications;
- c. Results of modeling and performance analyses;
- d. Producibility analyses;
- e. Reliability, Maintainability, and Availability (RMA) Analysis with considerations given to terrain and land restrictions under the Contractor's maintenance and support concept;
- f. System Project Safety Analysis;
- g. Project Planning through deployment and OT&E (as applicable) ;
- h. Methodology for monitoring and responding to environmental impact issues during deployment, pursuant to H.33 of the IDIQ contract; and
- i. Definition of any other services or materiel as may be required for the successful production and deployment of the solution selected.

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~~Deleted: <#>Updates to Value Engineering/Life-cycle Cost Analysis;¶ <#>Maintenance Program Planning;¶ <#>An "area" specific Integrated Logistics Support Plan (ILSP) for the deployment in the pertinent geographic area, to include maintenance, training, logistics and sustainment; ¶~~

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5.4 Environmental Planning Support

The Contractor will provide planning and support for environmental regulatory activities by identifying pertinent environmental laws, regulations, regulatory agency requirements

and processes; performing biological and cultural resources surveys and related research and data collection for each Task Order; supporting DHS as directed in the preparation of National Environmental Policy Act (NEPA), Endangered Species Act (ESA), Historic Preservation Act (HPA), International Boundary Water Commission (IBWC) and other applicable environmental analyses, data packages and permit submittal packages; resolving issues and providing related services to secure environmental approvals and permits. The Contractor will support DHS land use/property acquisition activities by utilizing the services of Boeing Realty Corporation to identify property ownership, secure Title Certifications and/or Preliminary Title Reports and provide other real estate-related services as requested by DHS.

5.5 Management of Technical Reviews

The Contractor shall host technical reviews to support the design effort for each geographical area. In addition, the Contractor may host a number of trade study reviews as mutually agreed upon with the government. For each technical review, the Contractor shall be responsible for:

- a. Ensuring all non-government participants hold the proper clearance for the meeting and the meeting location provides the appropriate security measures for the information to be discussed;
- b. Providing computer, voice and video conference access with security measures appropriate for the information discussed during the meeting; and
- c. Capturing meeting minutes and action items sufficient to document the government's decision making process.

The Contractor shall be available for interim ad-hoc meetings and regularly scheduled meetings with government representatives either by phone or at the Contractor's facility to resolve issues and action items and engage the government in the development of the area-specific design and to assure proper project planning per DHS MD 5100.

5.5.1 Deployment Design Review (DDR)

The basic design approach with optional configurations to deploy *SBI*net components for each geographical area shall be presented at the Deployment Design Review (DDR). At the conclusion of the DDR, if sufficient information is available, the government may approve the design approach and proceed with the detailed design stage. The Contractor will plan on forty (40) government representatives attending the DDRs. In instances where the lay-down design process has been interrupted by greater than 90 days after DDR has been performed, a Lay-down review may be used to refresh government knowledge of the lay-down design status.

The basic design approach of the selected alternative, with optional configurations to deploy *SBI*net components for each geographical/project area, shall be presented during the Deployment Design Review (DDR) meeting. The results to be presented by the Contractor at the DDR shall include, but not be limited to the following:

- a. Preliminary Deployment Drawings (30%-60% drawings) of the selected design including infrastructure footprint drawings, preliminary hydrology studies, and facility typical plans and sections.
- b. Preliminary top-level Bill of Materials including toolbox availability and compatibility; both IT and Non-IT assets will have BOM lists.
- d. Facility space requirements and proposed layouts including electrical requirements, HVAC requirements, etc.
- e. Communications architecture and associated back-haul capability.
- f. Draft Deployment Schedule.
- g. Final Project Specification for the geographical area to include technical performance parameters and alignment with A-Spec.
- h. Long lead items and schedule including land acquisition, agreements and other elements which might pose schedule risk.
- j. Trade study results to include modeling and analysis results; studies showing alternative infrastructure alignments.
- k. Engineering field site surveys results
- m. Risk Analysis.
- o. The results and/or status of any environmental or land use regulatory activities carried out in coordination with the Government and/or assigned to the Contractor pursuant to the SBInet master contract H.33 – Environmental and Land Use Regulatory Activities. (This sub-section not funded for Tucson West EA area outside of TUS-1 and AJO-1, i.e., Nogales Station, Sonoita Station, TUS-2/Tucson Station Phase 2).
- p. Land surveys required for infrastructure deployment as required by the Government.

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 <#>Preliminary top-level Bill of Materials including toolbox availability and compatibility; both IT and Non-IT assets will have BOM lists.¶
 <#>Command and control architecture to include operational and system views.¶
 <#>Facility space requirements and proposed layouts including electrical requirements, HVAC requirements, etc.¶
 <#>Communications architecture to include necessary land-mobile radios (LMR), implementation of P-25, and associated back-haul capability.¶
 <#>Draft Deployment Schedule.¶
 <#>Final Requirements Specification for the geographical area to include technical performance parameters and alignment with A-Spec.¶
 <#>Long lead items and schedule including land acquisition, agreements and other elements which might pose schedule risk.¶
 <#>Identification of Systems Interface Specifications unique to geographical area deployment.¶
 <#>Trade study results to include modeling and analysis results; studies showing alternative infrastructure alignments.¶
 <#>Engineering field site surveys.¶
 <#>Integrated Logistics Support analyses and recommendations including supportability, producibility, training (including simulation), and property disposal (real and personal).¶
 <#>Risk Analysis.¶
 <#>Preliminary Life-cycle costs.¶
 <#>The results and/or status of any environmental or land use regulatory activities carried out in coordination with the Government and/or assigned to the Contractor pursuant to the SBInet master contract H.33 – Environmental and Land Use Regulatory Activities.¶
 <#>Land surveys required for infrastructure deployment, including Land Ownership research and Rights-of-entry as required by the Government.¶
 <#>Initial Production/Deployment PWS for the geographic/project area.¶

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5.5.2 Deployment Readiness Review (DRR)

The detailed design approach to deploy SBInet components for each geographical area shall be presented at the Deployment Readiness Review (DRR). At the successful conclusion of the DRR, the government will approve the detailed design approach. This approval will not constitute acceptance by the government and instruction to proceed with deployment. The Contractor should plan on forty (40) government representatives attending the DRRs.

The detailed design approach to deploy SBInet components for each geographical/project area shall be presented during the DRR meeting. The Contractor shall develop and present the results of the design effort at the DRR, including, but not limited to the following:

- a. 95% Construction Drawings
- b. Communications Design to include: Primary communication links, relay tower locations, rates, capacities, paths/topology, path analysis, link budgets, GFE or Contractor provided.
- c. Installation procedures and checklists for all SBInet components, including vehicle and COP
- d. Mission performance analysis.
- e. Status of EA work, FONSI's construction permits.

- f. Systems Acceptance Plan for Project. (SBI-DID-001 revised)
- g. Revised plan & schedule.
- h. Final Bill of Materials (BOM), including status of long lead items and information about the availability of products including defining any unique design elements to block 1.0
- i. Review of Project Performance against the CONOPS
- j. Risk Analysis.
- k. C&A plan for the project.
- l. Project Spec

5.5.3 Trade Study Reviews

The Contractor may host a number of trade study reviews to facilitate progress of the design process as may be mutually agreed upon with the government. The Contractor shall provide the Government with copies of presentation materials and relevant supporting material upon which the trade study results are based.

5.6 Stakeholder Briefings

The Contractor will develop and present top-level briefings to government stakeholders on the results of the DDR and DRR. The briefings will be developed using existing material from the DDRs and the DRRs. In instances where the lay-down design process is anticipated to be interrupted by greater than 90 days within a given project area, a Lay-down review may be used to ensure that lay-down design status is understood by the Government and the location and status of lay-down design artifacts disclosed.

5.7 Task Order Management

The Contractor shall submit an initial Integrated Master Plan (IMP) that does not include management planning narratives, but does include the accomplishment plan, as well as a resource loaded Integrated Master Schedule (IMS) that follows guidance contained in the DoD IMP and IMS Preparation and Use Guide dated October 2005. The initial IMP and IMS shall be developed and submitted with the firm proposal for this Design Task Order, or with prior advance authorization commitment, and shall be revised to incorporate acceptable review comments received no later than 15 days following the submittal. The Contractor shall submit initial control account budgets with the IMP and IMS submittal. Following contract negotiations, the Contractor shall revise its IMP, IMS, and control account budgets based on changes agreed to during negotiations. This material shall represent The Contractor's plan and baseline for implementation and management of this Design Task Order. An IBR will be held with the Customer 15 days after the prime contract definitization, and those Suppliers that are not definitized by that time will be included in the IBR with resources at the summary level, no higher than the control account level.

The Contractor shall submit monthly Cost Performance Reports (CPRs) in accordance with the IDIQ Contract Earned Value Management Clauses H.9, H.10, H.11, and H.12.

Deleted: <#>Geospatial-referenced Final Deployment Drawing(s).¶
 <#>Site specific construction drawings and specifications for infrastructure and facilities, to include communications infrastructure.¶
 <#>Final development & interface specifications.¶
 <#>Assembly drawings & installation procedures.¶
 <#>Design/development analysis results.¶
 <#>Survey and engineering field test results.¶
 <#>Deployment readiness assessment.¶
 <#>Project test and design verification plan.¶
 <#>Life-cycle cost analysis (including operational costs for communication and other services).¶
 <#>Revised plan & schedule.¶
 <#>Final Bill of Materials (BOM).¶
 <#>Final CONOPS.¶
 <#>Risk Analysis. ¶
 <#>Production/Deployment PWS for the geographic area.¶

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The first month's CPR period end date shall reflect the close of the Contractor's first accounting cycle following the negotiations. CPRs shall reflect the cost and schedule performance for the Task Order and shall contain Variance Analysis Reports (VARs) for those control accounts that break the SBInet cost and schedule variance thresholds. The Contractor shall present this information to the Government on a monthly basis following the formal submittal of the monthly deliverables and at least 3 business days in advance of the monthly Program Management Review.

Contracts administrator manager shall perform general contract administration support during the period of performance of the Task Order. The administrator shall serve as the customer focal point for contractual matters. The administrator shall support program reviews. The administrator shall issue and track correspondence items (incoming and outgoing) and submit any additional proposals and/or Engineering Change Proposals. The administrator shall perform obligation analysis to assess the impact of change activity with regard to scope, change board activities, funding requirements, and export compliance activities.

The Contractor shall provide direction for suppliers working on the Task Order. The Contractor shall monitor, control, and report the plans, schedules, budgets, and variances associated with suppliers working on the Design Task Order.

5.8 COP Design

This section is cancelled as of the Task Order Modification of 01 November 2008.

6 Schedule and Deliverables

6.1 Period of Performance

The period of performance for this task order is August 1, 2007 to January 30, 2008.

6.2 Description of Deliverables

Following is a description for each of the deliverables expected to document the effort resulting from the survey and design accomplished for each geographical area.

6.2.1 Project Lay-down Plan

The Project Lay-down Plan shall include:

- a. GIS Document depicting assets and locations;
- b. Project specification per CDRL E054 and SBI-DID-0002 (Revised);
- c. Final Bill of Materials (BOM);
- d. Detailed descriptions of required Facility upgrades or modifications.

6.2.2 Project Test Plan

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Deleted: The Contractor shall perform an interim COP HW/SW design to provide sector specific design solution(s) for the SBInet program. The design will be developed and deployed in the new C3I Task Order to an interim release (C2I 0.5) until a new C3I system is designed and deployed to sectors under the C3I Task Order. The interim COP design will be responsive to the current SBInet DTO Project Technical Requirements and will be expressed in the design reviews.¶

¶ The Contractor will initiate the design of an interim COP HW/SW solution and will use the baseline COP capability, as designed in the P28 System Design Document (SDD), as a starting point for gap analyses and assessment of effort and risk associated with additional requirements identified and analyzed with this task order. This interim COP functionality (referred to as C2I Block 0.5) to be developed in the C3I Task Order will support DTO SBInet deployments (i.e., Barry M. Goldwater Range (BMGR), Texas Mobile, Tucson, and Yuma).

Deleted: Full Lay-down specification tree

Deleted: <#>Lay-down Interface Control Documents;¶ <#>Lay-down Block Diagrams, including Communications and interconnects; and¶

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This section is cancelled as of the Task Order Modification of 01 November 2008.

6.2.3 Acceptance Plan

The Contractor shall develop a plan for the acceptance of the system(s) installed as a result of the Project Lay-down Plan.

6.2.4 Updates to the System of System Plans

Updates to System of System Plans shall be developed for each geographic area. The updates shall tailor System of Systems Level plans to the geographic areas listed in this Project Plan and accompanying Project Technical Requirements documents. Updates shall be made to the following plans:

- a. Project Certification and Accreditation Plans
- b. Project Safety Plans

6.2.5 DDR Briefing

The DDR briefing shall include the contents described in Section 5.2 and 5.5.1.

6.2.6 DRR Briefing

The DRR briefing shall include the contents described in Section 5.3 and 5.5.2.

6.2.7 DDR Stakeholder Briefing

Reference 5.5.1 and 5.6.

6.2.8 DRR Stakeholder Briefing

Covered under 5.5.2 and 5.6.

6.2.9 Contract Data Requirements List (CDRL)

This Section provides a description of the data requirements that shall be developed and submitted to the Government by the Contractor. CDRL items provided by the Contractor at DDR shall be developed as initial-draft where applicable. CDRL items provided at DRRs are in final form. Data Item Descriptions (DIDs) for each of these CDRL items are also included at the end of this section.

Deleted: The Contractor shall develop a plan to test the implementation of the design described in the Project Lay-down Plan and DDR and DRR Briefings. These plans will be documented in a Detailed Test Design and Data Management Plans during detailed design.

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<#>System-of-Systems Training and Development Plan]
System
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The Contractor shall develop the CDRL items listed in Table 6.2.9-1, BMGR-III Deliverables, and submit to the Government at the applicable deployment review shown. (Explanation for "Notes" [column 2] is located in a table following the section deliverables tables.)

This Table is cancelled as of the Task Order Modification of 01 November 2008.

Table 6.2.9-1. BMGR-III Deliverables

CDRL #	Customer Reference	NOTES	SECTOR	Deliverable Name	Frequency of Delivery	DDO
E053-1300	1300-1	1	BMGR Phase III	GIS Document depicting assets and locations	DDR	SBI-DID-0005
E054-1300	1300-2	1	BMGR Phase III	Full lay-down specification tree	DDR	SBI-DID-0002
E037-1300	1300-3	1	BMGR Phase III	Final Bill of Materials (BOM)	DDR	SBI-DID-0010
E055-1300	1300-4	1	BMGR Phase III	Lay-down Interface Control Documents	n/a	SBI-DID-0012
E056-1300	1300-5	1	BMGR Phase III	Lay-down Block Diagrams, including Communications and Interconnects	DDR	SBI-DID-0011
E057-1300	1300-6	1	BMGR Phase III	Detailed descriptions of required Facility upgrades or modifications	DDR	SBI-DID-0006
E041-1300	1300-7	1	BMGR Phase III	Acceptance Plan	DDR	SBI-DID-0001
E058-1300	1300-9	1	BMGR Phase III	Production/Deployment PWS	DDR	SBI-DID-0004
E059-1300	N/A	1	BMGR Phase III	Detailed Test Plan	n/a	SBI-DID-0017
E050-1300	N/A	1	BMGR Phase III	Test Data Management Plan	n/a	SBI-DID-0018

The Contractor shall develop the CDRL items listed in Table 6.2.9-2, El Paso Deliverables, and submit to the Government at the applicable deployment review shown.

This Table is cancelled as of the Task Order Modification of 01 November 2008.

Table 6.2.9-2. El Paso Deliverables

E053-1500	1500-1		El Paso	GIS Document depicting assets and locations	DDR	DDR	SBI-DID-0005
E054-1500	1500-2		El Paso	Full lay-down specification tree	DDR	DDR	SBI-DID-0002
E037-1500	1500-3		El Paso	Final Bill of Materials (BOM)	DDR	DDR	SBI-DID-0010
E055-1500	1500-4		El Paso	Lay-down Interface Control Documents	n/a	DDR	SBI-DID-0012
E056-1500	1500-5	3	El Paso	Lay-down Block Diagrams, Including Communications and Interconnects	DDR	DDR	SBI-DID-0011
E057-1500	1500-6	3	El Paso	Detailed descriptions of required Facility upgrades or modifications	DDR	DDR	SBI-DID-0006
E041-1500	1500-7		El Paso	Acceptance Plan	DDR	DDR	SBI-DID-0001
E058-1500	1500-9		El Paso	Production/Deployment PWS	DDR	DDR	SBI-DID-0004
E059-1500	None		El Paso	Detailed Test Plan	n/a	DDR	SBI-DID-0017
E050-1500	None		El Paso	Test Data Management Plan	n/a	DDR	SBI-DID-0018

The Contractor shall develop the CDRL items listed in Table 6.2.9-3, Texas Mobile Deliverables, and submit to the Government at the applicable deployment review shown.

This Table is cancelled as of the Task Order Modification of 01 November 2008.

Table 6.2.9-3. Texas Mobile Deliverables

Code	Customer Package	Notes	Section	Deliverable	DRR	DDR	DRR	SBI-DID-0005
E053-1400	1400-1	2	Texas Mobile	GIS Document depicting assets and locations		DDR	DRR	SBI-DID-0005
E054-1400	1400-2	2	Texas Mobile	Full lay-down specification tree		DDR	DRR	SBI-DID-0002
E037-1400	1400-3	2	Texas Mobile	Final Bill of Materials (BOM)		DDR	DRR	SBI-DID-0010
E055-1400	1400-4	2	Texas Mobile	Lay-down Interface Control Documents		n/a	DRR	SBI-DID-0012
E056-1400	1400-5	2	Texas Mobile	Lay-down Block Diagrams, including Communications and Interconnects		DDR	DRR	SBI-DID-0011
E057-1400	1400-6	2	Texas Mobile	Detailed descriptions of required Facility upgrades or modifications		DDR	DRR	SBI-DID-0006
E041-1400	1400-7	2	Texas Mobile	Acceptance Plan		DDR	DRR	SBI-DID-0001
E058-1400	1400-8	2	Texas Mobile	Production/Deployment PWS		DDR	DRR	SBI-DID-0004
E059-1400	N/A	2	Texas Mobile	Detailed Test Plan		n/a	DRR	SBI-DID-0017
E050-1400	N/A	2	Texas Mobile	Test Data Management Plan		n/a	DRR	SBI-DID-0018

The Contractor shall develop the CDRL items listed in Table 6.2.9-4, Tucson Deliverables, and submit to the Government at the applicable deployment review shown.

This Table is modified as of the Task Order Modification of 01 November 2008. CDRLs E055, E056, E058, E059, and E050 cancelled as a consequence of the Task Order Modification. CDRL 054 renamed to Project Specification, and SBI-DID-0002 is being revised. This revised Tucson Table will be made into five tables, following the same structure. The first table will be titled Tucson Station I (TUS-1) Deliverables; the second table will be titled Alo Station I (AJO-1) Deliverables; the third table will be titled Nogales Station (NGL) Deliverables; the fourth table will be titled Sonolita Station (SON) Deliverables; and the fifth table will be titled Tucson Station II (TUS-2) Deliverables.

Table 6.2.9-4. Tucson Deliverables

E053-1200	1200-1	Tucson	GIS Document depicting assets and locations	DDR	DDR	SBI-DID-0005
E054-1200	1200-2	Tucson	Full lay-down specification tree	DDR	DDR	SBI-DID-0002
E037-1200	1200-3	Tucson	Final Bill of Materials (BOM)	DDR	DDR	SBI-DID-0010
E055-1200	1200-4	Tucson	Lay-down Interface Control Documents	n/a	DDR	SBI-DID-0012
E056-1200	1200-5	Tucson	Lay-down Block Diagrams, including Communications and Interconnects	DDR	DDR	SBI-DID-0011
E057-1200	1200-6	Tucson	Detailed descriptions of required Facility upgrades or modifications	DDR	DDR	SBI-DID-0006
E041-1200	1200-7	Tucson	Acceptance Plan	DDR	DDR	SBI-DID-0001
E058-1200	1200-9	Tucson	Production/Deployment PWS	DDR	DDR	SBI-DID-0004
E059-1200	N/A	Tucson	Detailed Test Plan	n/a	DDR	SBI-DID-0017
E050-1200	N/A	Tucson	Test Data Management Plan	n/a	DDR	SBI-DID-0018

The Contractor shall develop the CDRL items listed in Table 6.2.9-5, Yuma Deliverables, and submit to the Government at the applicable deployment review shown.

This Table is cancelled as of the Task Order Modification of 01 November 2008.

Table 6.2.9-5. Yuma Deliverables

CDRL	Customer Reference	NOTES	SECTOR	Deliverable Name	Frequency of Delivery	DID
E053-1100	1100-1		Yuma	GIS Document depicting assets and locations	DDR	SBI-DID-0005
E054-1100	1100-2		Yuma	Full lay-down specification tree	DDR	SBI-DID-0002
E037-1100	1100-3		Yuma	Final Bill of Materials (BOM)	DDR	SBI-DID-0010
E055-1100	1100-4		Yuma	Lay-down Interface Control Documents	n/a	SBI-DID-0012
E056-1100	1100-5		Yuma	Lay-down Block Diagrams, including Communications and Interconnects	DDR	SBI-DID-0011
E057-1100	1100-6		Yuma	Detailed descriptions of required Facility upgrades or modifications	DDR	SBI-DID-0006
E041-1100	1100-7		Yuma	Acceptance Plan	DDR	SBI-DID-0001
E058-1100	1100-9		Yuma	Production/Deployment PWS	DDR	SBI-DID-0004
E059-1100	N/A		Yuma	Detailed Test Plan	n/a	SBI-DID-0017
E050-1100	N/A		Yuma	Test Data Management Plan	n/a	SBI-DID-0018

The Contractor shall develop the CDRL items listed in Table 6.2.9-6, Deployment Review and System of Systems Deliverables, and submit to the Government at the applicable deployment review shown.

This Table is modified as of the Task Order Modification of 01 November 2008. CDRLs E009 and E014 cancelled. CDRLs E019, E020, E021 and E060 and associated DIDs are revised.

Table 6.2.9-6. Deployment Review and System of Systems Deliverables

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E019	19
E020	20
E009	9
E021	21
E014	14
E060-1x00	1x00-1

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E019	19
E020	20
E009	9
E021	21
E014	14
E060-1x00	1x00-1

The Contractor shall develop the CDRL items listed in Table 6.2.9-7, Task Order Business and Management Deliverables, and submit to the Government as described.

Table 6.2.9-7. Task Order Business and Management Deliverables

CONJ	Customer Reference	NOTES	SECTOR	Deliverable Name	Frequency of Delivery	CDRL
E010	None	6	All	Integrated Master Schedule (IMS)	With Proposal 15 days following receipt of customer comments	IDIQ Contract Clause H.9, H.10, H.11, H.12
E011	None	6	All	Integrated Master Plan (IMP)	With Proposal 15 days following receipt of customer comments	n/a
E052	None	5, 6	All	Contract Performance Report (CPR)	Initial Monthly	IDIQ Contract Clause H.9, H.10, H.11, H.12

This Table is modified as of the Task Order Modification of 01 November 2008. Notes 1-3 are cancelled. Notes 4-6 are retained and re-numbered as 1-3.

CDRL Notes Descriptions

Note	1	Final Lay-Down Plan information for BMGR III will be incorporated into the Yuma Lay-Down Plan
Note	2	Final Lay-Down Plan information for Texas Mobile will be incorporated into the El Paso Lay-Down Plan
Note	3	When necessary (not currently planned or provisioned by the Government) the lay-down block diagrams and detailed description of facility upgrades and modifications shall include specific detail related to provision of land-mobile radio (LMR), Implementation of P-25, and associated backhaul capability.
Note	4	The Government may elect to review more than one geographic area per DDR and DRR. In such cases these CDRL's will cover combined reviewed areas.
Note	5	The first months CPR period end date shall reflect the close of Boeing's first accounting cycle following negotiations. Subsequent CPRs shall be presented monthly thereafter at Program Management Reviews.
Note	6	A single submittal for all Sectors. Information specific to sectors will be separately described in sections or appendices.