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	Homeland Security Information Network Program Management Plan (PMP), 02/20/2009
	Homeland Security Information Network Requirements Management Plan, 02/20/2009
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July 20, 2010

#### Re: 10-OPS-041/DHS 10-0392

This is the final response to your February 14, 2010, Freedom of Information Act (FOIA) request to the Department of Homeland Security (DHS) for a copy of each substantial report from DHS to Congress or a Congressional Committee between January 1, 2008 to the present, that was not published on the DHS website. Seventy (70) pages where referred to the Office of Operations Coordination (OPS) from DHS Headquarters for our review. This office received them on July 14, 2010.

After carefully reviewing the responsive documents, I determined that they are appropriate for public release. They are enclosed in their entirety; no deletions or exemptions have been claimed.

Provisions of the FOIA allow us to recover part of the cost of complying with your request. In this instance, because the cost is below the \$14 minimum, there is no charge.

If you need to contact us about this request, please refer to **10-OPS-041**. You may contact this office at 202-357-7626.

Sincerely,

IC.P.

Michael Page FOIA Officer Office of Operations Coordination and Planning

Enclosure(s): 70 pages

Assistant Secretary for Legislative Affairs

U.S. Department of Homeland Security Washington, DC 20528

FEB 2 4 2009



Pursuant to the requirements of 31 U.S.C. Section 720, the following letter provides an update on the implementation status of recommendations made by the U.S. Government Accountability Office (GAO) in GAO-09-40, "Information Technology: Management Improvements Needed on the Department of Homeland Security's Next Generation Information Sharing System". The Department of Homeland Security (DHS) Office of Operations Coordination and Planning (OPS) appreciates the opportunity to provide an update on our progress addressing the recommendations within the report.

The letter is being provided to the following Members of Congress and the Director of OMB:

The Honorable Bennie G. Thompson Chairman, House Committee on Homeland Security

The Honorable Peter King Ranking Member, House Committee on Homeland Security

The Honorable Edolphus Towns, Chairman, House Committee on Oversight and Government Reform

The Honorable Darrell Issa Ranking Member, House Committee on Oversight and Government Reform

The Honorable Joseph I. Lieberman, Chairman Senate Committee on Homeland Security and Governmental Affairs

The Honorable Susan M. Collins, Ranking Member Senate Committee on Homeland Security and Governmental Affairs

The Honorable Jim Nussle, Director Office of Management and Budget

I appreciate your interest in the Department of Homeland Security. If I may be of further assistance, please contact the Office of Legislative Affairs at (202) 447-5890.

Sincerely. tim/Howe Acting Assistant Secretary

www.dhs.gov

Significant progress has been made towards implementing stronger management controls of the Homeland Security Information Network (HSIN) program. HSIN has been removed from the Office of Management and Budget (OMB) Management Watch List and received all green (passing) scores according to DHS pre-scoring for Budget Year 2010 business case submissions (OMB 300). In addition, HSIN received an "A-" rating for compliance with the Federal Information Security Management Act in FY 2008. While we note these accomplishments, it is continuing efforts to improve the HSIN Program. Due to strongly improved management efforts during Fiscal Year (FY) 2008 with the HSIN program, OPS has begun to further focus efforts in FY 2008 and FY 2009 have resulted in multiple successful uses of HSIN with our partners.

The following responses address actions taken since the report was issued.

#### Recommendation: Staffing the program office appropriately

DHS has established multiple billets for the OPS CIO Division, which manages the HSIN Program. OPS extended conditional offers to selected applicants for two positions, which have been accepted, and 15 other positions are in the process of being filled. 10 of these 15 positions are new billets that were authorized by Congress in FY 2009. One of the two accepted positions will provide greater technical oversight and direction for projects not related to HSIN, allowing Division staff to focus more on HSIN. The individual filling this position reported for duty on December 8, 2008. The other position is at the GS-14 grade level and is a Requirements Manager focusing on HSIN. This individual will be responsible for leading the development of the HSIN change control process. OPS anticipates the Requirements Manager will report within 90 days pending the necessary security processing. OPS is working with the DHS Office of Security to advance the applicant through the clearance process.

These positions support architecture, security, and privacy among other functions within OPS CIO, with a strong emphasis on the HSIN program. These information technology management professionals will improve HSIN's ability to address statutory and interoperability requirements with partner systems. These resources will also provide more specific requirements management and process control.

#### Recommendation: Identifying staff roles and responsibilities

In April 2008, the OPS CIO Division, consulted with staffing professionals to develop an organizational support structure for the Division. This external team recommended an organizational model for the future structure of the OPS CIO Division, including a detailed description of the model and the required staffing resources. This work was incorporated into the HSIN Program Management Plan which includes roles and responsibilities of key

individuals within the HSIN program. The latest version of the HSIN Program Management Plan is enclosed.

#### Recommendation: Ensuring all requirements are gathered, analyzed, and validated

Refining and managing the requirements for the constant evolution of HSIN remains a high priority for OPS. OPS has taken actions to manage requirements by allocating additional staff to gather input from users and by working closely with HSIN advisory boards. To organize and manage the requirements process, OPS created a Requirements Manager position. In conjunction with the HSIN integration and Operations and Maintenance (O&M) Team, OPS has a documented requirements management process.

The HSIN Outreach Team, through their mission integration and outreach efforts, continues to gather and analyze requirements. Within the confines of the FY 2008 budget for HSIN, OPS focused detailed outreach efforts on a representative sample of communities. This approach is consistent with the HSIN Advisory Committee (HSINAC) recommendations from September 17, 2008 to focus outreach efforts on a sample of communities due to resource constraints. As such, a significant portion of mission integration activities are focused on multiple disciplines (such as emergency management and law enforcement) in three states (Virginia, Tennessee and Florida) and two national communities (Federal Operations and Law Enforcement). As mission integration activities are completed in these communities, the business processes that are captured will be leveraged as part of additional engagements with other communities. OPS expects that these additional engagements will validate and expand on the current functional requirements and result in a best practices approach from user outreach. OPS will significantly increase outreach resources in FY 2009. As staff levels increase, the HSIN Program will expand contact with our wide range of partners.

Working with the DHS Information Sharing Coordinating Council (ISCC), OPS is close to establishing a governance body to prioritize the business processes and operational requirements for the HSIN portal. Senior operators from the Department's components and other sources (the DHS Office of Policy, DHS Office of the Chief Information Officer, external professional organizations, the U.S. Department of Justice's Global Justice Information Sharing Initiative, and the critical sectors, and other key stakeholders of HSIN) will make up the HSIN governance body. This body will provide a way for the Department to validate and prioritize business processes and operational requirements through Federal, state, local, tribal, territorial, non-governmental organizations, and private sector representation.

OPS uses a three-pronged requirements gathering process:

- <u>DHS Shared Mission Communities</u>: Functional subject matter experts from DHS Components, and through the Components, state, local, tribal, and private sector requirements are gathered through this existing governance body.
- <u>HSIN Mission Operators Committee (MOC)</u>: DHS is implementing the MOC to not only review known requirements but to also recommend additional requirements. The MOC will also set the strategic direction of HSIN. The voting

members of the MOC will be functional subject matter experts representing all homeland security mission areas. The DHS Intelligence and Analysis State and Local Program Office will be a voting member of the MOC, allowing for direct representation of state, local, tribal, and private sector partners.

• <u>HSIN Outreach Team</u>: OPS has funded a state and local outreach team that serves to gather requirements and train DHS partners. OPS is in the process of increasing the outreach team five-fold this Fiscal Year.

The HSIN Program management team is developing a Requirements Management Plan which outlines the requirements gathering, analysis, and validating process. The latest version of this plan is enclosed. The vetting of requirements will take place through the HSIN Change Control Board, discussed in the following recommendation update.

# Recommendation: Developing and implementing a requirements change control process

Change control remains essential to effectively manage the evolution of HSIN. OPS follows best practices for this process, including the DHS Systems Engineering Life Cycle (SELC) which provides the systems engineering framework enabling program managers to efficiently and effectively deliver desired capabilities to users. The Department is in the process of establishing a HSIN Change Control Board (CCB), consisting of representatives from the Department's components, to support this process over time. A significant portion of the members will be derived from the HSIN MOC. Through the HSIN Program Manager, the CCB's recommendations will be presented to the MOC for approval. The DHS Intelligence and Analysis State and Local Program Office, which has direct contact with state, local, tribal, and private sector partners, will cast votes on these recommendations. The HSIN Program Manager will chair the CCB to manage the technical milestones of the HSIN upgrade.

OPS continues to work with the Department's ISCC following the adjournment and release of recommendations from the HSIN Governance Integrated Project Team (IPT). The HSIN Governance IPT provided recommendations for establishing the aforementioned DHS HSIN Mission Operators Committee, a mission-focused governance body composed of operators that are functional subject matter experts across all homeland security mission areas. The HSIN MOC will validate and prioritize new requirements. The HSIN Program Manager will be responsible for implementing the MOC approved requirements. The CCB will track all changes through implementation. This proposed structure is being presented to the Department's ISCC.

As stated earlier, OPS has created a position that requires an experienced individual dedicated to requirements management and change control processes. As mentioned above, OPS has selected an individual for that position and anticipates the selected individual will be onboard within 90 days pending the necessary security processing.

#### Recommendation: Ensuring effective risk management by identifying all key risks surrounding the project and developing risk mitigation plans and completion milestones

Risk Management is implemented throughout the oversight of the HSIN Program. OPS employs personnel trained in this essential program management skill and requires regular reports identifying risks and documenting their associated risk mitigation plans. The HSIN Program Manager oversaw the development of the Risk Management Plan that includes processes concerned with conducting risk management planning, identification, analysis, responses and monitoring, and control.

The HSIN Program Manager reviews informal status reports, which include risks, from the contracting teams on a weekly basis. Each month, a formal risk report is submitted to the HSIN Program Manager from the integration and operation and maintenance contractor. The latest version of the Risk Management Plan is enclosed.

All of the enclosed updated documents are consistent with the Department's commitment to further strengthen the program management controls. The Department provides these documents with the understanding that these documents are subject to change. These documents will be updated as necessary. All HSIN Program and Project documents have been and continue to be included in submissions to the DHS Enterprise Architecture Center of Excellence (EACOE) for review, and then based on their recommendation, forwarded to the DHS Enterprise Architecture Board (EAB) for approval.

The Enterprise Architecture Board (EAB) acts as the Executive Steering Committee for DHS IT programs and has the primary responsibility to oversee the Department's Enterprise Architecture. The EAB evaluates and reviews IT programs, approves technology, and ensures the Homeland Security Enterprise Architecture (HLS EA) is updated and maintained. The EAB is the final approval authority for Program Alignments, Technology Insertions, Service Insertions, Data Insertions, and Other Decision Request Packages, to ensure architectural alignment within the Department. The EAB also has the right to review programs where investments are categorized as non-IT in the DHS OMB 300 submission, if those programs contain IT components or interact with DHS information systems. Additionally, the EAB will review investments and make recommendations as directed by Acquisition Directive 102-01.

The Enterprise Architecture Center of Excellence (EACOE), as defined in the EAB Charter, is assigned responsibility for DHS technology recommendations. The EACOE has been tasked by the EAB to conduct reviews of Program Alignments, Technology Insertions, Service Insertions, Data Insertions and Other Decision Request Packages to ensure alignment with the HLS EA. The EACOE is the functioning body that will review the information provided by the components, focus groups, or headquarters elements, and provide recommendations to the EAB. The Department looks forward to providing further updates on its progress in implementing the recommendations from GAO-09-40, "Information Technology: Management Improvements Needed on the Department of Homeland Security's Next Generation Information Sharing System."

#### Enclosures

- 1) HSIN Program Level Documents
  - HSIN Program Management Plan
  - HSIN Program Requirements Management Plan
- 2) HSIN Vendor Implementation Documents
  - Risk Management Plan



# Homeland Security Information Network

Program Management Plan (PMP) 02/20/2009

Version 2.6

Contract Number: HSHQPA-06-J-00418



#### **Revision History**

Date	Version	Description	Author
12/16/2004	1.0	Initial Submission of Document	HSIN Program Management Office (Names Redacted)
01/22/2005	1.1	Incorporates comments and additions from HSIN Program Manager (PM)	HSIN Program Management Office (Names Redacted)
07/20/2007	2.0	Document updated to reflect latest HSIN Program management changes	HSIN Program Management Office (Names Redacted)
6/20/2008	2.1	Minor organization updates	HSIN Program Management Office (Names Redacted)
11/04/2008	2.2	Updates to grammatical and spelling typos	HSIN Program Management Office (Names Redacted)
11/11/2008	2.3	Minor updates Added a section on coordination with the DHS CIO	HSIN Program Management Office (Names Redacted)
11/18/2008	2.4	Minor updates after meeting with the CIO	HSIN Program Management Office (Names Redacted)
11/20/2008	2.5	Minor updates after meeting with the CIO	HSIN Program Management Office (Names Redacted)
02/20/2009	2.6	Minor updates after meeting with CIO	HSIN Program Management Office (Names Redacted)

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### PROGRAM MANAGEMENT PLAN (PMP) Signature Page

HSIN/COP COTR,

I recommend approval and acceptance of the Risk Management Plan (RMP).

J. meluty p

20FEB09 Date

Raymond Melusky, DHS HSIN OPS Organization Program

sand

Harry McDavid, DHS HSIN OPS CIO

POFEBOS Date



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### **1 Executive Summary**

The Homeland Security Information Network (HSIN) Program is managed by the DHS Office of Operations Coordination and Planning (OPS) Chief Information Officer (CIO) Division and a contracted Program Management Office (PMO) support staff. The mission of HSIN is to provide a secure and trusted national platform for Sensitive but Unclassified (SBU) information sharing and collaboration between Federal, state, local, tribal, territorial, private sector, and international partners engaged in preventing, protecting from, responding to, and recovering from all threats, hazards, and incidents within the authority of Department of Homeland Security (DHS).

The HSIN Program Management Plan (PMP) is the top level management control document for the DHS HSIN Program. This PMP defines the overall HSIN Program management structure and provides top-level guidance for conducting subordinate projects and lifecycle support activities. In alignment with the overarching HSIN PMP, each project under the HSIN Program will have an individual project-specific management plan to ensure proper management controls are in place to effectively support all aspects of the Program. Currently, the HSIN technical solution is being upgraded to a new platform to meet user security and interoperability requirements. The upgrade is managed as a new integration project under the existing HSIN investment program. Operations and Maintenance (O&M) is managed as a project within the program. The Outreach efforts will be split out into a project in FY09 to provide better management controls for this crucial system support effort as the team expands to meet mission support needs.

The Program level plans set expectations for the project level plans. Currently all project level plans are submitted by contractors, and in many cases reflect each contractor's unique methodologies. The HSIN PMO will first and foremost ensure that project level plans include the DHS required level of detail.

This PMP will not provide detailed descriptions of all the major process areas as defined in the DHS System Engineering Life Cycle (SELC) or the Project Management Book of Knowledge. This document will introduce the major process areas and refer to other program detailed plans.

Support and authority for the HSIN Program are provided by:

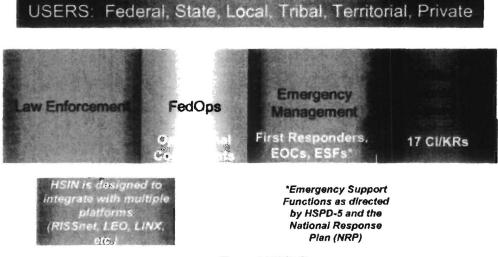
- Homeland Security Act of 2002
- Homeland Security Presidential Directive Five (HSPD-5)
- 9/11 Commission Report
- The Homeland Security Council (HSC) Katrina Report
- Procedures for Handling Protected Critical Infrastructure Information
- DHS Policy Memorandum for Information Exchange and Sharing. October 24, 2006
- The National Strategy for Homeland Security
- The National Security Plan of the United States of America
- The DHS Strategic Plan
- DHS Secretary's Goals



### 2 Introduction

#### 2.1 Scope

Mission communities serviced by HSIN include: Law Enforcement, Emergency Management, Intelligence, private critical sectors, and the homeland support elements of the Department of Defense (DOD). HSIN is broken down into the following user groups as depicted in the figure below.





To meet the needs of such a diverse user based, the HSIN PM must work collaboratively with several governance bodies and control boards. The HSIN PM and the PMO must answer to the Government Accounting Office (GAO), DHS Office of the Inspector General (OIG), the national press, and Congress. Consequently, the HSIN Program relies on its partnerships with the DHS Information Sharing Governance Board (ISGB), the DHS Information Sharing Coordination Committee (ISCC), the HSIN Advisory Committee (HSIN AC), and the HSIN Mission Operators Committee (MOC) for guidance. Working with these guidance bodies as well as other information sharing governance entities, ensures that HSIN adheres to all applicable information sharing policies while meeting the needs of the diverse user population. Details of the governance model are included in the HSIN Concept of Operations (CONOPS) document.

To attain the level of information sharing envisioned in the 9/11 Commission Report, the HSIN PM must work with other agencies to facilitate interconnections between information sharing solutions. DOJ manages two Federal portals that currently provide SBU-level communications and information sharing for Federal, State, local, and tribal law enforcement agencies. These portals are Law Enforcement Online (LEO) and the Regional Information Sharing Systems Network (RISSnet). LEO was developed as the primary vehicle to deliver information from Federal law enforcement agencies to State, local, and tribal law enforcement agencies, and



currently supports anti-terrorism, intelligence, law enforcement, criminal justice, and public safety communities nationwide.

#### 2.2 Contents

The HSIN PMP is organized into six sections that provide information on: 1) the program scope and status; 2) program planning; 3) program management structure; 4) project structure; 5) program control; and 6) detailed planning documents.

The Introduction includes program scope information and a description of the contents of the PMP. The Program Planning section includes key events and resource planning, while the Program Management Structure section describes the organization, required reports, and resource availability. The HSIN Project Structure section outlines the projects that comprise the HSIN Program. The Program Control section discusses maintaining performance goals and measurements, establishing a reporting schedule, managing the schedule, and using earned value to evaluate performance. Finally, the Detailed Planning Documents section outlines the major plans that make-up that management controls for the HSIN Program.

Additionally, the following detailed planning documents are referenced in the HSIN PMP.

- Requirements Management Plan
- Concept of Operations (CONOPS)
- Risk Management Plan (RMP)
- Operational Performance Plan
- Quality Management Plan (QMP)
- Acquisition Plan (AP)
- Alternatives Analysis
- Test and Evaluation Master Plan (TEMP)
- Configuration Management Plan (CMP)
- Outreach Strategic Plan
- Enterprise IT Architecture Application System Perspective Documentation
- Training and Training Plans
- Contract Management
- Resources Management

#### 2.3 Current Status (Q1 FY09)

HSIN continues to move forward to meet mission requirements and provide services for a diverse user community. The contract to update the software solution for HSIN was awarded in May of 2007 under a competitive bid using the Enterprise Acquisition Gateway for Leading Edge Solutions (EAGLE) contracting vehicle, and the acquisition was commonly referred to as HSIN Next Generation. With this new contract, the HSIN PM now has greater visibility into Program spending and increased control in working with the new integration and O&M vendor. Additionally,



The Exhibit 300 submitted to the Office of Management and Budget (OMB) in 2008 listed HSIN as a program in mixed lifecycle. The existing software platform has completed Milestone Decision Point (MDP) five and is in Operations and Support. The project to update the software has completed MDP 1 (Project authorization), and the Project should submit the required artifacts for MDP 2 (Alternative Selection) by early CY09. The Acquisition Program Baseline (APB) document was updated to reflect the project to update the software for HSIN and has been submitted to (Acquisition Program Management Division) APMD for review.

The GAO, in report GAO-09-40, made the following recommendations to strengthen program management before migrating users to the updated software platform:

- Staff the program office appropriately;
- Identify staff roles and responsibilities;
- Ensure all requirements are gathered, analyzed, and validated;
- · Develop and implement a requirements change control process; and
- Ensure effective risk management by identifying all key risks surrounding the project and develop risk mitigation plans and completion milestones.

In response to these recommendations, all program management documentation will be reviewed and updated.

Reports issued from Congress, the HSIN Advisory Counsel and OMB keyed off of the GAO report with slightly different interpretations of the GAO findings. The HSIN PM and PMO are responding to all reports. These external responses must be cleared through legal and the OPS front office before being submitted. The review cycle still remains an issue.

The Outreach team is starting mission integration sessions to elicit operation requirements from select communities. These requirements will the back to the functional requirements described in the Functional Requirements Document (FRD) that accompanied the HSIN software upgrade Request for Proposal (RFP). The Outreach team will standardize the mission integration session processes and train more team members to facilitate the engagements.

The security team is working on updating the Certification and Accreditation (C&A) for the HSIN system hosted in the Stennis Data Center. This C&A will then be used as the basis for the C&A of the backup system that is being stood up in the EDS Data Center.

The integration team has completed the HSIN CS requirements updates targeted for release with Spiral one. These updates were to add functionality to the current platform to meet the immediate needs of the private sector communities. The HSIN team is working on final acceptance from the HSIN CS Program Management. The requirements and design for the implementation of the new software solution has been completed. The HSIN PM and the project contractors are working through the details of the implementation and user migration.

The DHS CIO's office has sent a draft list of internal Department portals that will be consolidated onto the HSIN platform. The initial consolidation candidates are portals currently



hosted outside of the DHS data centers. The initial portal to be migrated to the current HSIN software solution (pre the HSIN Next Generation acquisition) is the FEMA Secure Portal. Due to timing issues with its current managed services provider, the FEMA solution will be migrated by the end of January.

The HSIN PMO and the integration developer are working to stand up a backup HSIN system in the DHS approved data center in Clarksville, VA. HSIN will be one of the first large systems hosted in this data center. The HSIN team is working on connectivity issues with the DHS CIO's office and the contractor. Once the system is stood up and operational, HSIN will have a warm backup.



### 3 Program Planning

#### 3.1 Key Events

HSIN was created as an extension of a pre-existing system, the Joint Regional Informational Exchange System (JRIES). The table below provides a listing of the key milestones from JRIES through the HSIN software update. Details of the HSIN software update implementation are included in the HSIN implementation Project Management Plan. Milestones completed before FY09 are shaded in the figure below.

HSIN High-level Milestones	Date
JRIES formally Adopted as DIA program	FY03 - Q2
JRIES Program Transferred to DHS	FY03 - Q4
JRIES expanded mission renamed to HSIN	FY04 - Q2
HSIN to all 50 states, 53 major urban areas, five U.S. territories, the District of Columbia, and international partners.	FY04 - Q4
HSIN moves Groove to Microsoft	FY05 - Q2
NOC COP Deployed	FY08 - Q3
HSIN Intel migrates to ESP platform	FY08 - Q1
HSIN system moved to Stennis	FY08 - Q2
HSIN Next Generation awarded	FY08 - Q3
HSIN Next Generation CS requirements deployed	FY08 - Q4
HSIN backup system in EDS facility online	FY09 - Q1
HSIN Next Generation IOC	FY09 - Q4
HSIN Intel migrates to HSIN NextGen	FY10 - Q1
HSIN Outreach Team buildup	FY10 - Q1
HSIN Share Point solution retired	FY10 - Q1
HSIN Next Generation FOC	FY10 - Q2

#### Table 1 - HSIN Key Events

The following major activities have been completed in the last six month (second half of 2008)

- The HSIN Next Generation contract was awarded to General Dynamics in late May
- The transition of the HSIN O&M support to General Dynamics was completed in late July
- The transition of the COP O&M support to General Dynamics was completed in September
- Development and Testing systems were stood up by General Dynamics
- The HSIN Spiral 1 requirements were delivered by General Dynamics
- HSIN mission integration sessions started in key states

The following major activities will be completed in the first half of calendar year 2009:

- The HSIN Business Case will be delivered to OMB
- The Governance structure for HSIN will be updated and the HSIN Mission Operators Committee (MOC) will be stood up
- The initial portal from the portal consolidation effort will be migrated to HSIN
- The current HSIN system will go through another Certification & Accreditation



- The platform for the HSIN software upgrade will be stood-up in the production environment in the Stennis Data Center
- A backup system for HSIN will be stood up in the EDS Data Center
- The HSIN Program will implement a detailed public relations campaign

#### 3.2 Resource Planning

The HSIN PM must plan for and acquire all of the resources that the Program requires to properly perform the work of the project management, project development, acquisition, logistics, and O&M. Managing resources continues throughout the lifecycle of the HSIN Program. Additional resources may be added or removed depending on the phase of the Program. Work assignments should be planned, documented, and discussed with the PM and Program team members and contractors.

The HSIN Program is currently staffed with three dedicated Government employees and contractors from two major contracts. The PMO contract is lead by Blackstone Technology Group with two major sub-contractors. This contract is in its second option year with two additional option years available. The implementation and O&M contract is led by General Dynamics with several other sub-contractors. This contract is currently in the base year, with four potential options years to follow.

The DHS OPS CIO is in the process of staffing his division to meet the needs of the HSIN Program and other programs within the OPS Portfolio. Government employees will transition into leadership positions and contractors will scale back to provide support. This staffing transfer to government employees will start to take place Q1 FY09 and continue until all key positions are filled in the DHS OPS CIO's Staffing Plan.

The HSIN program management structure is based on the following management objectives:

- Manage to and support the DHS strategic mission.
- Provide visibility and control over all work planned and performed to assure timely and accurate completion.
- Control cost by assigning the most appropriate resources available to perform when needed.
- React quickly to DHS' HSIN changes or operational requests.
- Continuously measure, manage, and enhance customer satisfaction.



### 4 Program Management Structure

The DHS OPS CIO serves as the HSIN Program Designated Accrediting Authority (DAA) and senior level oversight for the PM. (Refer to the Program System Security Plan for DAA responsibilities.) As the senior oversight manager for the Program, the OPS CIO provides the interface to DHS executive leadership and external oversight organizations.

The Executive Management and interface roles are outlined below:

#### **HSIN Business Owner (DHS OPS Director)**

- Represent HSIN to Congress
- Submit HSIN budget and over-guidance requests
- Represent HSIN to the public
- Review recommendations from the HSIN Advisory Council
- Appoint OPS CIO

#### **DHS CIO Portal PMO Lead**

- Review HSIN high-level documentation
- Review HSIN acquisition plans
- Develop DHS portal consolidation strategy

#### **MOC Lead**

- Review new HSIN requirements
- Prioritize implementation of new requirements
- Review adherence to policies from ISGB and SMCs

#### HSINAC Lead

- Lead monthly status calls
- Lead scheduled conferences
- Brief HSIN Business Owner on HSIN status as observed by the HSINAC

#### **HSIN Program Director (DHS OPS CIO)**

- Manage strategic direction for HSIN
- Oversee HSIN public relations campaigns
- Work with information sharing system program managers from other agencies
- Work with DHS CIO and DHS Enterprise Architecture Board
- Represent HSIN on the DHS CIO Counsel

#### iCAV Program Manager

- Work with HSIN and COP PMs on integration of geospatial requirements
- Work with HSIN O&M Project Management to coordinate iCAV's use of the HSIN/COP helpdesk
- Communicate with HSIN PMO representative on latest Department geospatial updates



#### HSIN CS Program Manager (NPPD)

- Represent the requirements of the critical sectors HSIN communities
- Approve implemented sector specific requirements
- Integrate HSIN CS communication messaging with the rest of HSIN
- Integrate the HSIN CS Outreach and support activities with the rest of HSIN

#### HSIN Intel Program Manager (I&A)

- Represent the requirements of the Intel community
- Approve implemented sector specific requirements
- Migrate HSIN Intel uses back a single HSIN platform
- Integrate the HSIN Intel Outreach and support activities with the rest of HSIN

While the roles outlined above detail strategic management activities for the HSIN Program, the tactical management of the program requires day to day coordination from the HSIN Program and Project Management roles outlined below. The HSIN Program Manager and the PMO staff are the interface points between executive steering and daily operations managers.

#### **HSIN Program Manager**

- Program Management Strategy and Planning Evaluate and finalize the decision documents, charters, recommendations, and transmissions from the HSIN Project Teams, Working Groups and additional organizational elements of the HSIN Program.
- Policy and Governance Defines roles and responsibilities. Provides programmatic oversight, including developing and maintaining the strategic vision and forwardlooking perspective for the Program.
- Planning and Scheduling -- Provides planning and scheduling support.
- Acquisition Management Provides the programmatic acquisition management for the exit program and future program changes.
- Financial Management (guidance and controls) Implementation of specific fiscal practices and controls.
- Operational Performance Management The management and process of the definition for Program metrics.
- Performance Metrics Ongoing reporting of Program and O&M monitoring.

#### **COP Program Manager**

- Program Management Strategy and Planning Evaluate and finalize the decision documents, charters, recommendations, and transmissions from the COP O&M and developed teams
- Planning and Scheduling Provides planning and scheduling support.

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- Acquisition Management Provides the programmatic acquisition management for the exit program and future program changes.
- Financial Management (guidance and controls) Implementation of specific fiscal practices and controls.



- Operational Performance Management The management and process of the definition for Program metrics.
- Performance Metrics Ongoing reporting of Program and O&M monitoring.

#### **Outreach Project Management**

- Relationship Management
- Communications with all HSIN program teams
- Operational Requirement Management Provide procedures and guidance for determining, developing, and tracking requirements for the Program and projects.
- Training Develop a Training Program for the HSIN Team members and the client, conduct and deliver training, and monitor training attendance.

#### **Development and Acquisition Project Management**

- Technical Direction and Oversight
- Concept and Technology Development
- Capability Development
- Production and Deployment
- Test and Development

#### **Operations and Maintenance Project Management**

- Operational Security
- Operations Support
- Baseline/Engineering Change Proposal (ECP) and Change Control Board (CCB) Management
- Installation, Maintenance and Repair
- Facilities/Infrastructure Management

#### 4.1 Organization

Due to the evolving nature of the HSIN solution, the program is organized as a group of interconnected projects managed under a single investment program. Project managers are responsible for developing required artifacts for each required review board. The PM and the PMO will review all artifacts before submission to the required review boards. Each major technical upgrade will be handled as a new project within the program. These upgrade projects will adhere to gateway reviews established in the DHS System Engineering Life Cycle (SELC), Enterprise Architecture Board (EAB), and Investment Review Board (IRB). The O&M work will be managed as a project in accordance with the Operational Analysis included in the OMB Exhibit 300. As the Outreach, or Mission Integration, effort expands to meet the required mission objectives, the tasking will be managed as the third major project under the HSIN Program. This will add the necessary controls to effectively manager this multi-million dollar effort.

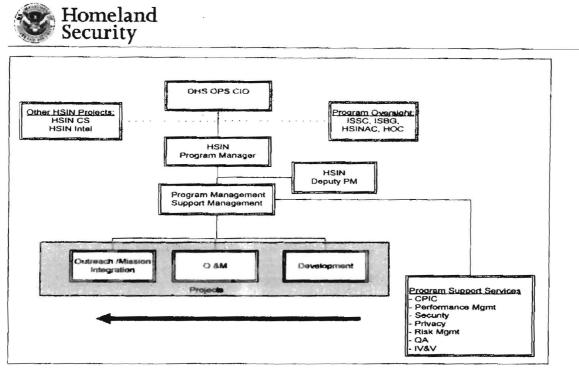


Figure 2 - HSIN Program Structure

Title	Role
DHS OPS CIO	Senior Leadership Advisor
HSIN PM	Tactical direction of the HSIN
	Program
HSIN Deputy PM	Administrative Support for PM
Program Management	Assistant to the HSIN PM
Support Manager	
Outreach / Mission Integration	Contractor Lead for the
PM	Outreach / Mission Integration
	team
O&M PM	Contractor Lead for O&M
Development PM	Contractor lead for HSIN Next
	Generation development
Program Support Services	Contractor CPIC Lead
Program Support Services	Contractor ISSM
Program Support Services	Contractor ISSO

**Table 2 - Management Roles and Responsibilities** 

The organization for each project will be unique to that effort. It will be contained within the individual project plans or control documents for the respective efforts. The constant in all projects is the oversight by the Program Management and the PMO, which is responsible for the acceptance of all project deliverables. In turn the PM will use an Independent Validation & Verification (IV&V) contract for final quality control on all major deliverables. All artifacts delivered to any oversight body will be reviewed and approved by the IV&V.



#### 4.2 Required Reports

All reports will be delivered to the PM and the PJMO using a predefined email distribution list. Project managers and contract leads will notify the PM when circumstances warrant late submittal on any of the required reports.

#### Internal Reports

The table below describes the reports which will be required within the Program unless superseded by contract terms.

	•	5 M	2001 S
Weekly Contractor Status Reports	Contractor PMs	Weekly	Accomplishments, risks, issues, financial status, deliverable status, meetings attended
Internal Weekly Slide Deck	O&M Team	Weekly	System performance and helpdesk usage
Program Integrated Master Schedule	Program Management Team	Monthly	A master schedule rolled up to major milestones for the Program
Monthly Risk Reports	Non- development Contractors	Monthly	Listing of major risks with mitigation plans for high-level risks
Earned Value Reports	Development Contractor	Monthly	As contractually defined

**Table 3 – Required Internal Reports** 

#### **External Reports**

The table below describes the reports which will be required for the HSIN Program executive leader and other governance organizations

	$\Delta_{abb}$		• • • • • • • •
Weekly Activity Report (WAR)	PM	Weekly	Project leads provide milestone updates and schedules to the PMO lead
Admiral - Director's Slide Deck	PM	As required	Program updates for the CIO to brief the OPS Director
OMB/CPIC	PM/CPIC Team	Monthly/ Quarterly	
Performance Reports	Program Management Team	Monthly/ Quarterly	
Congressional Responses	Program Management Team	As required	
GAO Responses	Program Management Team	Every 90 days	
OIG Responses	Program Management Team	As required	

Table 4 - Required External Reports



All external reports must be approved by OPS leadership before sending out of the Department. In most cases this involves a legal review. Please refer to the OPS Correspondence manual for proper procedures and lead times required for formal deliverables outside of the OPS CIO Division.

#### **Scheduled Briefing**

The table below describes the briefings which will be required for the HSIN PM.

<sup>™</sup> ≮kquency	
Weekly	Status and communication meeting for all members of the Outreach Team
Weekly	Status, action item tracking, and communications between O&M, Outreach, and Program Management
тлн	Quick status meeting with PM and contractor leads
Monthly	Program status review from PMO lead
	Weekly Weekly T/TH

Table 5 - Required HSIN PM Briefings

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### 5 HSIN Project Structure

The size of this Level One investment has necessitated creating a program with subordinate projects. The DHS SELC provides precise guidance on software development projects from inception to O&M. Each of the projects under the program will provide a tailoring plan to most effectively manage their work while meeting the DHS SELC requirements. Project managers will report directly to the PM and his designated PMO representative.

#### 5.1 Integration Projects

Portals are almost always developed using an iterative process. In this sense, using a product, rather than a project, paradigm is more appropriate for managing portal development. When managing a product, a conscious decision is made to limit the scope of requirements for each major release of the product. The HSIN PM has made the decision to limit the scope of the software update to those requirements that were included in the FRD. New requirements must be vetted through the change management process and approved by the MOC.

The Integration projects run from initiation to O&M as defined by the IRP and SELC processes. All project artifacts must conform to Program guidance established by this Plan, or they must document deviations in their individual Project Tailoring plans.

The Integration team implements operational and functional requirements collected by the Outreach Teams. In accordance with DHS policy all development projects greater then \$20 million will utilize earned value management. The program management team will perform an assessment of all contractor EVM systems. The integration contractor must work with the HSIN PM and PMO to align processes with the DHS SELC.

#### 5.2 Outreach/Mission Integration Project

The HSIN Program serves a diverse group of users across all levels of government and the private sector. As depicted in Figure 2, HSIN user groups can be based on geography, level of government, or mission area. Some users fit into multiple groups according to the three categorizations mentioned above. The Outreach, or Mission Integration Team, must make sure that all HSIN users are supporting the DHS mission to Prevent, Protect, Respond, and Recover from terrorist acts, criminal activities, or national disasters.



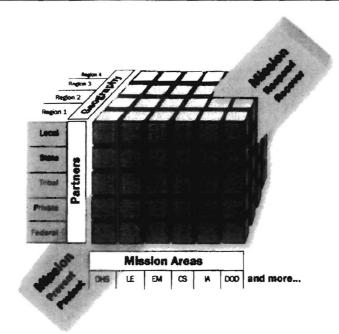
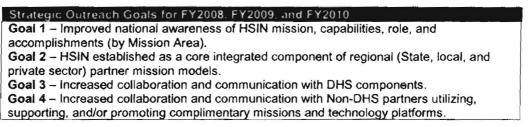


Figure 3 - HSIN Partner Model

Outreach encompasses the external facing components of the HSIN Program, including resources and activities focused on:

- Relationship Management
- Training
- Communications
- Requirements

To effectively tackle the Outreach challenges of the HSIN program, four Outreach Goals are identified in Table 6 below.



#### Table 6 - Outreach/Mission Integration Goals

In the Spring of 2008, the program management team submitted a FY10 Over-guidance Request to increase the size of the Outreach Team to meet the mission of HSIN. If the request is granted, the Outreach Team will have the resources necessary to integrate into missions of our HSIN partners. This will ensure that HSIN becomes an integral information sharing and collaboration solution in our partners' missions.



The Outreach Strategic Plan serves as the overall management plan for the Outreach Project. It serves as the Outreach Project Management Plan. This document introduces the Communications Plan, Training Plan, and Requirements Management Plan. In addition, the plan includes appropriate performance measures to gauge the efforts of the team.

All DHS Components using the HSIN name for their information sharing solution must integrate their Outreach communications efforts. The HSIN Program Director and the HSIN Outreach

#### 5.3 O&M Projects

The O&M project team will work with designated DHS hosting centers to maintain the HSIN solution. Each new technology upgrade will be supported by the O&M team upon successful completion of system testing in the production environment. Earned value reporting is not required for O&M efforts.

The O&M project manager works with the HSIN PM and the program management team to package minor system enhancements during periods where the Program is not utilizing a development project. During these time periods, the O&M project manager may become the Program Managements Technical Design Agent.

#### 5.4 Relationship with DHS CIO

As the HSIN software upgrade nears FOC, plans will be made to migrate other Sensitive But Unclassified (SBU) portals onto the HSIN platform. The HSIN PMO is working with the DHS CIO's Portal Program Office (PPO) to establish a migration schedule. A standard plan will be developed to address all aspects of the migrations and to minimize end user disruption.

HSIN must comply with other CIO mandates including data center integration, Trusted Internet Connection (TIC), Single Sign-on (SSO), and shared information architecture. The HSIN PM will work with the OPS CIO Enterprise Architect to say on top of Department level activities that must be included in the overall schedule.



### 6 Program Control

#### 6.1 Performance Goals and Measurements

DHS components are required to report Program performance to DHS Headquarters, OMB, Congress, and other authorities as required by GPRA, Clinger-Cohen Act, and National Strategy for Homeland Security. Components must provide performance information for the Future-Years-Homeland-Security-Program-(FYHSP) system that tracks budget, planning, and programming information.

To ensure it is delivering an information sharing solution that best meets the needs of its users and other stakeholders, the HSIN PM recognizes the importance of developing and using performance metrics. While the HSIN program understands the criticality of performance metrics, it also realizes that measuring the effectiveness of an information sharing solution is a challenging undertaking.

In order to take a comprehensive and holistic approach, performance metrics should leverage established best practices for measuring and reporting system performance. Different types of measures should be used for various purposes in order to optimally manage a program/process and to identify and understand the improvements necessary to program/process outputs and outcomes. Accordingly, the HSIN program follows DHS Performance Management Guidance as documented in the Department Policy Manual.

Performance measurement must be viewed and approached from increasing levels of granularity, through a multi-tiered perspective.

- 1. Bottom Tier (Lowest level performance measures) Measures system performance at the Program level.
- 2. Middle Tier (Mid-level performance measures) Measures alignment with DHS information sharing initiatives at the Departmental level, across all Department missions.
- 3. Top Tier (Highest level performance measures) Measures alignment with Federal ISE efforts and initiatives.

Figure 3 below depicts how the performance of an information sharing solution, specifically HSIN, should be measured.

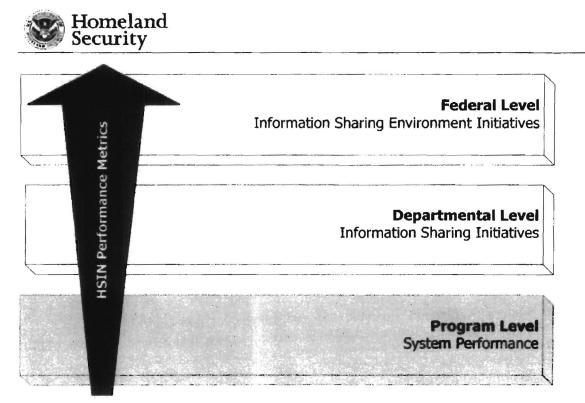


Figure 4 - Alignment of HSIN Performance Metrics

Currently, the HSIN Program has three performance measures that are tracked in the DHS Future Years Homeland Security Program (FYHSP) system: 1) total number of user accounts, 2) percent of active HSIN users, and 3) percent of time the HSIN is fully operational. The HSIN Program recognizes that measuring active users alone will not reflect the true value of the solution. Since a percentage of users will only access the system during an incident, this measurement must be mapped to actual incidents during the measurement period. Therefore, the HSIN software upgrade must and will facilitate in-depth system monitoring and enable robust reporting on information access. These measures, though important, only represent the initial steps involved with information sharing performance monitoring. Continued progress will be made in defining and using additional system performance metrics.

The HSIN Program is also focusing its efforts on measuring user involvement and satisfaction. As the HSIN Outreach Team grows, the HSIN PM will track mission integration sessions to measure the effectiveness of user operational requirements gathering, communication, and, if appropriate, implementation. Higher level outcome performance measures will include customer satisfaction with HSIN's incident preparation, prevention, response, and recovery capabilities.

Additionally, DHS is implementing a comprehensive approach for measuring the effectiveness of information sharing. The Information Sharing and Collaboration Branch (IS&C) of the Office of I&A, as well as the ISCC is spearheading this effort at the Departmental level. Current milestones focus on building the institutional infrastructure that enables DHS to create a secure and trusted information sharing environment. As these milestones are achieved, the IS&C creates



new benchmarks, which are coordinated through the ISCC, to move toward outcome-oriented measures, tracking the effectiveness of DHS information sharing.

As a member of the Federal ISE, DHS currently and will continue to assist the PM-ISE to design, baseline, validate, and refine information sharing performance metrics with an emphasis on the results of Federal cross-agency information sharing. Through the ISCC, the IS&C collects, compiles, and submits data to the PM-ISE. Based on the early stage of maturity of many ISE capabilities, performance management activities currently focus on assessing ISE progress. As such, current measures used to gauge ISE implementation progress are characterized as output or compliance measures and generally focus on the progress of individual ISC member agencies. However, as the ISE matures, the performance management approach will mature to move from measuring individual agency progress to measuring the overall performance of the ISE. Future measures will evolve, emphasizing the mission outcomes or results of implementing elements of the ISE.

FYHSP supports the Planning, Programming, Budgeting, and Execution (PPBE) process. It is an information warehouse maintained on relational databases and is Internet-accessible via DHS Online. The system is secure and can be accessed only through dedicated DHS telecommunications lines by specifically-authorized personnel. Originally developed for producing the annual FYHSP report, the system was expanded to handle a comprehensive array of related budget- and performance-type information such as quarterly performance reporting (QPRs), communicating DHS guidance, Capital Investment Plans (CIPs), and information that supports the DHS Strategic Plan and priorities FYHSP also automatically feeds the Performance section of the OMB Exhibit 300. Information is entered into FYHSP by program managers or their representatives who are responsible to keep it updated and accurate. They are the "owners" of the data.

The milestones listed below are included in the FYHSP system as of March 2008.

#### **2008 Performance Goals and Measurements**

- **OPS:** Provide an Internet Protocol (IP) based Secure Video Teleconference System (SVTS) for the Continuity of Operations (COOP) site.
- HSIN/COP: Complete development of and geographic separation of HSIN/COP backup systems to ensure continuity of operations and viability of back-up systems. Establish a stand-alone test and evaluation environment for the system. Prepare for and award EAGLE contract vehicle for "NextGen" HSIN/COP. The HSIN Advisory Council (HSIN-AC) will be established to provide independent, policy-level advice and recommendations to DHS leadership for the communities they represent. As the sponsor of the HSIN portals, HSIN Mission Coordination Committee (HMCC) will be refining its role and responsibilities as the Department-wide requirements gathering body for operational components and their external partners. Incorporate critical operational functionality of system as prescribed by the HMCC.
- Mission Systems (MS): Improved information sharing capability for the National Operations Center (NOC) and DHS Senior Leadership through engineering design and acquisition of an Enhanced Non-Secure/Secure voice Communications Bridge for the National Operations Center (NOC).



# 2009 Performance Goals and Measurements

- OPS: Ensure the ability of the Incident Management Division (IMD) to coordinate three major incidents simultaneously by further developing the Crisis Action Team (CAT) roles and responsibilities; Implement the Mission Blueprint Study; Implement the 15
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- HSIN/COP: Complete the test and evaluation phase of HSIN/COP NextGen; NOC: Achieve complex analytics, decision support and mission capabilities required to support the Secretary.
- MS: Design and implement a database management system (DBMS) for the NOC, improve the speed and access to information, and improve conferencing capabilities.

### 2010 Performance Goais and Measurements

- OPS: Extend geospatial capability to external partners as appropriate (in conjunction with iCAV).
- HSIN/COP: Establish process for multi-level information sharing between platforms and ٠ develop cross-domain information sharing strategies. Complete the initial proof of concept and an alternatives analysis for wireless/remote/portable access to HSIN (multimedia access and input).
- MS: Continue to implement NAC Building 3 LAN room and data center design plans. • Continue to examine the applicability and viability of established Business Process Management (BPM) procedures.

#### **2011 Performance Goals and Measurements**

- . **OPS:** Establish an OPS facility (St. Elizabeth's) that fully meets the needs for space. infrastructure, and continuity of operations during all conditions.
- HSIN/COP: Implement the cross-domain information sharing strategies as appropriate. Implement wireless, remote access to HSIN/COP for core DHS group. Continue to examine applicability and viability of established Business Process Management (BPM).
- MS: Develop technology transition strategy for OPS move to new campus location. Continue to improve the DHS Secretary's SITROOM.

#### 2012 Performance Goals and Measurements

- HSIN/COP: Expand capabilities of wireless remote access to HSIN/COP to a broader . user base. Continue to examine applicability and viability of established Business Process Management (BPM).
- MS: Further refine technology transition strategy for OPS move to new campus location • and for the DHS Secretary's SITROOM.



## 2013 Performance Goals and Measurements

• HSIN/COP: Develop policies and guidelines for international partners. Continue to examine the applicability and viability of established business process management procedures. Develop, plan for, and implement a strategy for HSIN/COP future year replacement strategy. Award the contract for the development, design, building, testing and delivery of the new replacement system for HSIN/COP systems that will be available at both the NOC and COOP sites.

### 2014 Performance Goals and Measurements

• HSIN/COP: Continue development, design, building, testing and delivering the new replacement system for the HSIN and COP systems at both the NOC and COOP sites.

Please refer to Appendix A for Current Investment Level Performance Measures Tracked in FYHSP.

#### 6.2 Quality Management

Quality reviews will be planned into the HSIN Program from the start of every release through the retirement/sun setting of services. Quality management applies to both the development of the solution (project level), and the processes used to manage the implementation of the project delivery and to manage services and products.

The plan for managing quality is documented in a HSIN QMP. The QMP describes how the program/project team will find and correct problems and monitor compliance with requirements and procedures.

Quality is executed in two parts for the HSIN Program – internal and external. The program team will manage quality throughout the life-cycle of the program, so that delivery of the releases is of the highest quality. At selected milestones, a review is conducted as part of the Quality Assurance Review (QAR) process. A reviewer from the HSIN Program Support Team QA area will conduct reviews and review the findings with PM and Systems Leads.

In addition, the IV&V team will perform both product and process audits. They will report audit results directly to the PM and the CIO. All documentation that must be approved above the OPS CIO level will be reviewed by the IV&V team. The IV&V team will brief all Program and Project Managers on their Standard Operating Procedures (SOPs).

#### 6.3 Program Improvement Program

The HSIN Program Improvement Program (PIP) is fundamental to effective and efficient operations and maintenance. The HSIN PMO will continue to improve and upgrade processes and procedures to achieve three main objectives:



- To provide ongoing improvements in the HSIN Program processes and procedures.
- To identify and provide visionary solutions to DHS in support of HSIN. The HSIN Program Management Team will do this by examining the "what if", and then imagining the "what should be." Moving solutions from vision to reality will require not only evaluating how COI/stakeholders do business, but also working with the stakeholders to determine and design how they could be doing business. This approach will assure that DHS is making wise investments and that it can stand the rigor of scrutiny from the various organizations that oversee the DHS mission.
- To ensure the HSIN Program Management Team takes advantage of new and improved processes and technology to cost effectively and efficiently improve our levels of service. One aspect of this approach is to establish a technology refresh plan managed by the HSIN PMO, for the fielded technology. The HSIN integration team will support this activity by actively working with existing partners and other vendors to understand the state and direction of applicable technology. This technology refresh plan will be aligned with the DHS Enterprise Architecture reference models.

#### 6.4 Schedule Management

The HSIN Program Master Schedule will roll up tasking to the fourth level of the Work Breakdown Structure (WBS) across all projects. Project Managers will be responsible for providing to the OPS CIO monthly schedule updates as part of their status reports, and OPS will use a Microsoft Project file to capture this schedule information. Deviations from the schedule will be noted in weekly status reports and corrective action plans will be developed. The HSIN PM and PMO will approve necessary re-baseline efforts. All tasks and actions items that fall outside of the master schedule will be tracked in weekly status reports and reported during weekly meetings.

Cost accounts for the HSIN integration contract are broken out to the fourth level of the Program Work Breakdown Structure (WBS). The master schedule for the base year of the HSIN integration and O&M contract is broken down in the following figure.



· · · · · · · · · · · · · · · · · · ·	Homeland Security Information Network (HSIN)
*	
1.1	
,	Program Milestones
1.1.2	Spiral 1: HSIN Critical Sectors
1.1.2.1	E Spiral 1 Labor & Travel
1.1.2.2	E Spiral 1 Material
1.1.3	E Spiral 2: HSHI Initial Operational Capability (IOC)
1.1.3.1	E Spiral 2: GDAIS Labor & Travel
1.1.3.2	Architecture & System Engineering - Spiral 2
1,1.3.3	Development and Implementation - Tools - Sprial 2
1.1.3.4	Development and implementation - Scripts - Sprial 2
1.1.3.5	Development, and Implementation - Subs - Spiral 2
1.1.3.6	Organizational Change and Training - Spiral 2
1.1.3.7	Operational / Site Activation - Spiral 2
1.1.3.8	E Spiral 2 Material
1.1.3.9	E System Testing and Evaluation - Spiral 2
1.1.4	E Spiral 4 Development NEXTGEN FOC
1.1.4.1	Spirel 4 GDAIS Labor
1.1.4.2	Analysis, Design, Development & implementation - Spiral 4
1.1.4.3	Organizational Change and Training - Spiral 4
1.1.5	HSIN Next Gen Operations and Maintenance Support
1.1.5.1	🕑 Program Management - 08M / Tiers 2 & 3
1.1.5.2	E Help Desk Services- 08M
· · · · · · · · · · · · · · · · · · ·	Transition Supoprt Services - O&M - BAE
artin ang	BAE HSM Site B Standup

Figure 5 - HSIN Master Schedule Extract

#### 6.5 Earned Value Management Concept

Earned Value Management (EVM) is a widely accepted performance-based program management technique that integrates the technical performance requirements with the elements of cost and schedule. DHS requires the use of EVM on major investments (Level 1, Level 2, and IT Level 3) in development, on major systems in development, and on their associated contracts that have a value of \$20M and greater. The HSIN Program will follow guidance established in the DHS Earned Value Management Guide.

Effective 23 May 2008, the HSIN Program Management team requires eligible contractors to complete and submit limited EVM inputs on a monthly basis to account for program resource expenditures. An initial pilot will define detailed collection and reporting requirements. Changes to the reporting and collection requirements may constitute an increase in scope for certain contractors. As required, subcontractor contract modifications will be drafted after the initial pilot.



#### 6.6 Program Oversight Responsibilities

HSIN is the Department's primary SBU information sharing platform solution, although several other information sharing solutions exist that also service HSIN users. Since HSIN is a Level One investment and other solutions have similar missions, HSIN is being carefully watched by many oversight organizations. HSIN has had to answer to the GAO, DHS IG, OMB, and Congress on a regular basis. Interactions with these bodies include providing documentation, briefings, reports, and interviews. All of these interactions need to be tracked by the HSIN PM and coordinated with the OPS Front Office liaison personnel. All correspondence leaving the Department will be reviewed by the HSIN IV&V team.

#### 6.7 Program Governance Responsibilities

The HSIN Program relies on advisory councils and other information sharing groups to ensure that the system is correctly mapped to Department goals and missions. Figure 4 below depicts the relations between HSIN and these governance boards and committees.

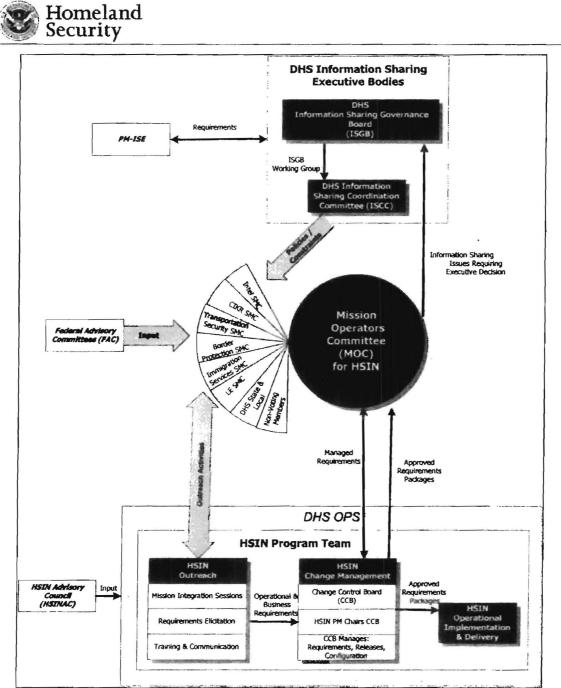


Figure 6 - HSIN Governance

The DHS Information Sharing Governance Framework leverages previous efforts, particularly the establishment of the Information Sharing Governance Board (ISGB) and Information Sharing Coordination Committee (ISCC) executive bodies, incorporates a segment architecture approach, and creates the appropriate structures and touch points for strong mission operator involvement. This framework provides the mechanisms to support HSIN development and direction necessary for decision-making and community buy-in. Through this governance structure, the HSIN



management team can address information sharing policy issues, gather community specific requirements, and solicit feedback from multiple mission groups. Along with special attention given to coordination among and between governance bodies, DHS will provide the resources necessary to support and sustain the SMCs and the HSIN Mission Operators Committee (MOC), both comprised of mission operators. The SMCs primarily consist of operators who provide mission requirements and have the ability to reach out to their state and local contacts for requirements. The MOC will be comprised of voting members, representatives from each SMC, and non-voting members, representatives from policy, finance, legal affairs, security, compliance, the HSIN Program, IT, etc. Figure 4 above depicts how the governance bodies work together to support HSIN partners.

This framework will pave the way for accurate and timely information sharing and strong partnerships with stakeholders, as well as ensure that information is properly managed and appropriate security is in place. The framework establishes the necessary environment to get the right information to the right person when needed so that the mission can be accomplished. Through this framework, the Department will be well equipped to coordinate the integration of mission requirements, technology, and policy for robust information sharing, system integrity, and long-term mission success.

The framework consists of a multi-tiered decision making structure designed to:

- 1. Represent all mission communities by enabling the Department and its partners to speak with one voice on information sharing matters; and
- 2. Align with the appropriate policies and standards, including those from the PM-ISE.

Segment architecture is a detailed results-oriented approach for delivering common, shared, or enterprise services. The approach takes a cross-organizational functional view, with a focus on mission delivery and operational efficiency. In addition, segment architectures help drive planning/budgeting decisions for priority functional areas and enterprise services and align business benefits with technical strategies.

Department leadership recognized that in order for the information sharing governance structure to be successful, it had to move away from a technology approach to a mission-focused approach. Consequently, this governance model was developed through guidance by the Federal Segment Architecture Methodology (FSAM) and, thus, incorporates segment architecture best practices, guidance, and ideas. This incorporation of segment architecture is particularly evident in the composition and role of the SMCs.

In the DHS Information Sharing Governance framework, the segment architecture approach is being used to drive operator and business involvement on HSIN. As a result, each SMC is focused on a specific mission area, aligned with the segment architecture functional areas. Each SMC is comprised of the appropriate mission operators and, through the SMCs, users from state and local, for example, have a voice. Two such examples of segment architecture aligned SMCs are the Law Enforcement (LE) SMC and the Infrastructure Protection (IP) SMC. Both groups have made significant headway in their efforts and, with their accomplishments and progress, may provide models by which other SMCs follow suit. The SMCs will be a major source of requirements for HSIN. To ensure the HSIN program is driven by the operators, the MOC



consists of operator representation from the SMCs and serves as the interface between the SMCs and the HSIN program, ensuring the mission operator requirements are captured and reviewed.

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## 7 Detailed Planning Documents

The HSIN Program Management approach deals with the current realities by advocating a comprehensive approach to define, design, develop, integrate, and implement the various business and technical components and solutions needed to support the DHS Mission. While quick reaction tasking and near-term efforts will get tasks done, they will not establish a solid HSIN Program foundation. These efforts will also take reasoned, thoughtful, and detailed planning; communication with and involvement of all the stakeholders; and creation of a focused, committed partnership between the HSIN Program Management team, stakeholders, and contractors. Through this approach, the HSIN PMO will resolve the difficulties inherent in building an operational IT solution.

Specific plans to execute activities of the program are developed in detailed planning documents. These plans are not a part of the PMP but are considered supporting documents, and the PM is responsible for developing them separately after the approval of the PMP. The PMP also describes the basic objectives of these documents and how they relate to the planned Program activities.

#### 7.1 Operational Requirements Management Plan

Requirements engineering involves requirements development and requirements management. The HSIN Requirements Management Plan documents the process and responsible owners for all aspects of requirements management at the Program level. Requirements management involves tracking all requirements from inception to user acceptance. The HSIN Program team must work with external governance bodies to validate and prioritize requirements. The figure below outlines the work flow as is moves from user requirements gathering to change management and finally to the approval process.



Figure 7 - Requirements Process

Though requirements are generated from multiple sources, it is primarily the Outreach Team that elicits business requirements from Communities of Interest (COI) owners and their designated end users. The Operations and Maintenance (O&M) Team captures user requirements and



manages minor updates between major system development efforts. The functional requirements Lead works with the Outreach Team to translate the work flows and business requirements into functional requirements. The functional requirements Lead then works through the SELC phases, from requirements management to user acceptance. All new requirements will enter into the change management system to be vetted and prioritized by the HMSS.

Requirements Management on the HSIN Program is broken down into the following phases:

- Phase One Mission Integration Session
- Phase Two Requirements Mapping
- Phase Three Requirement Change Management
- Phase Four Requirements Approval and Prioritization
- Phase Five Requirements Gate Reviews

HSIN Program requirements are labeled either as operational, functional, or technical. The operational requirements represent high-level technology-independent user descriptions of information sharing business processes related to information sharing. The functional requirements represent high-level needs for capabilities that an information sharing system needs to fulfill the operational requirements. Most major functional requirements have been identified for the HSIN software upgrade. The HSIN Outreach Team is tying the functional requirements back to operational requirements. Finally, the technical requirements represent lower level requirements from both the users and the Department.

#### 7.2 Risk Management Plan

Risk Management establishes processes concerned with conducting risk management planning, identification, analysis response, and monitoring and control. Risk and Issue Management identifies and focuses HSIN management attention on major issues that threaten the success of the HSIN Program and impacts to other products and services. Risk and Issue Management is a subset of project management and is accomplished in parallel with financial, schedule, quality, and requirements management.

Risk Management will be conducted in accordance with the DHS Risk Management Plan, ensuring critical areas of uncertainty are surfaced early enough to be addressed without adversely affecting cost, schedule, technical, or programmatic performance.

As part of the current Program Risk Management Process, there are two types of meetings that are held and each has its own purpose. The weekly meetings are informal meetings, while the monthly meeting is a formal meeting.

#### Weekly Meetings

• The HSIN Program Manager and the Contract Project Managers meet for 30 minutes each Tuesday and Thursday morning to discuss current tasking, risks, and issues. During the Tuesday meeting, risks from the Contractor Status Report from the previous week are reviewed.



- The Outreach Team Meeting is held every Wednesday. During this meeting the Outreach, Training, and Communications Teams discuss current tasking, risks, and issues.
- The Operations and Maintenance (O&M) meeting is held every Thursday. During this meeting the O&M Team, the PMO, the Outreach team, and the Integration Team discuss current tasking, risks, and issues.

#### **Monthly Meetings**

• A Risk Report is provided by the integration and O&M team and is submitted during the last week of each month. The report outlines the risks from the implementation and O&M contractor's risk perspective. The risks are reviewed during the next scheduled weekly O&M meeting.

The Risk Management Program is centered on three documents: the Risk Management Plan (RMP), the Risk Description Document (RDD), and the Risk Register (a listing of the risks). The RDD is a template that will be completed for each identified risk. It will contain the detailed information about each risk, identify the risk owner and will outline the activities/plans for acceptance or mitigation of the risk. Major risks will also have a more detailed Risk Response Plan.

#### 7.3 Operational Performance Plan

The Operational Performance Plan establishes processes to collect, distribute, and act on performance information. This involves status reporting, progress measurement, forecasting, and best practices improvement to increase efficiency and to fulfill the needs of the Program and external customers.

#### 7.4 Quality Management Plan

The QMP establishes quality policies, objectives, and responsibilities to ensure the HSIN Program satisfies DHS needs. The Quality Management program develops and maintains a Quality Plan that sets procedures for quality assurance, quality control, and continuous improvement activities. The QMP is executed by the PMO through out the life-cycle of the HSIN Program.

Quality reviews will be planned into the HSIN Program from the start of every release through the retirement/sun setting of services. Quality management applies to both the development of the solution (project level), as well as the processes used to manage the implementation of the project delivery and to manage services, products and other deliverables.

The plan for managing quality is documented in a HSIN QMP. The QMP describes how the Program and Release teams will find and correct problems and monitor compliance with requirements and procedures.

Quality can be executed in two parts for the HSIN Program – internal and external. The program team will manage quality throughout the life-cycle of the program, ensuring delivery of the releases is of the highest quality. At selected milestones, a review is conducted as part of the



Quality Assurance Review (QAR) process. A reviewer from the HSIN PMO QA area will conduct reviews and review the findings with the PM and Leads.

#### 7.5 Acquisition Plan

Services for the HSIN Next Generation software upgrade were procured using a cost plus fixed fee contract under the Enterprise Acquisition Gateway for Leading Edge Solutions (EAGLE) contract vehicle. The vendor was awarded a five year contract (one base year with four additional option years) for \$62 million for HSIN integration, O&M, and outreach services. Since financial transparency was not possible with the previous integration and O&M vendor, additional costs may be incurred during the initial year of the EAGLE contract. In September of 2008, a modification was added to the contract to account for software maintenance renewals. PMO and Outreach services are provided by a vendor in the second of four possible options years. The contract value, including all option years, is \$21.6 million.

The HSIN Program APB is being updated to reflect KPPs associated with the HSIN Next Generation Project. This is one of the major artifacts required for the Acquisition Review Board (ARB) process and the performance reporting process.

#### 7.6 Alternatives Analysis

The alternatives analysis considered all elements required in the OMB Exhibit 300 (e.g. architecture compliance, risk analysis and mitigation, system performance, lifecycle costs, project management, technology, security, etc.). It concentrates on the acquisition of new capabilities and support, operations and maintenance of the existing HSIN systems.

A different set of alternatives were documented in the HSIN Business Case required by OMB. This business case was developed FY09 Q1, and will be delivered FY09 Q2.

#### 7.7 Test and Evaluation Master Plan (TEMP)

All releases for HSIN will perform testing or validation so that the base-lined solution meets the agreed-upon requirements. The Testing and Evaluation Group will manage the Release, application, and infrastructure developing and testing environments. The Testing and Evaluation Group will complete the QA and UAT, testing in a separate environment that duplicates the appropriate production environment. The environment that houses a duplication of production will be used to troubleshoot production issues.

#### 7.8 Configuration Management Plan (CMP)

CM is the discipline of managing the evolution of a Configuration Item (CI) by identifying, documenting, controlling, and auditing the item. The objective of CM is to establish and maintain the integrity of CIs by applying procedures for configuration identification, configuration control, configuration status accounting, and configuration audits. This CM plan defines uniform practices for managing identified CIs. The plan describes the practices to be followed throughout the lifecycle of CIs to ensure that changes to CIs are controlled, monitored, and recorded, and that the integrity of all items are maintained.

A near-term CM goal will be to minimize the number of systems associated with CM. See the figure below to view the current systems involved with HSIN CM.



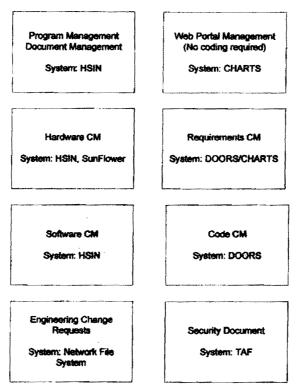


Figure 8 - HSIN CM Systems

The HSIN PM will work with the DHS OCIO to align with evolving standards and move all project related information into DHS approved data centers.

Starting in FY09, the HSIN PM will assign a PMO resource to manage program documentation following the guidelines in the CMP. This responsibility will not be considered a permanent position, but rather a dedicated effort to refine proper management controls. All contract deliverables, work products, and SELC required documentation will flow through a delivery process approved by the HSIN PM and controlled by the HSIN PMO.

The CMP is the document that describes how the program and development teams will manage the construction and distribution of the solution. This document identifies the procedures, resource requirements, tools, responsibilities, and the organization that will be employed to properly perform CM for the Program. The following diagram highlights the key steps and documents.

#### HSIN 7 serves to:

- (1) Accommodate change (using a change control process)
- (2) Optimize the reuse of standards and best practices
- (3) Ensure that all requirements remain clear, concise and valid



- (4) Communicate items (1), (2) and (3) to each user promptly and precisely
- (5) Verify that the results conform in each case

Changes to the HSIN system functionality must be vetted and approved by the HSIN Operators Committee (MOC). The HSIN PM must prepare change requests for the MOC to review. Details of the change management process are documented in the HSIN Program Requirements Management Plan.

#### 7.9 Enterprise IT Architecture Application System Perspective Documentation

As part of the IRP, an assessment of a program's architectural alignment, reviewers will examine how the program maps to the DHS EA Conceptual Data Model. The EAB will use this information to evaluate data requirements, quality, availability, reliability, in an information sharing context to avoid redundancy. This portion of the assessment will require the program team to map the data used by the program to the Data Objects in the DHS EA Conceptual Model. The information included in this worksheet can also be used by the program team to address questions in the OMB Exhibit 300.

#### 7.10 Training and Training Plans

Training applies and will be available to all HSIN Team members, Federal, state, tribal, local, agencies, COIs, and contractors/subcontractors. The HSIN Training Plan, along with the allotted funding, will be built into the release project plans.

For many projects, training the client/customer is an essential step in assuring that the solution will be implemented and used successfully. Therefore, careful planning, follow through, and execution of a training plan is required.

#### 7.11 Communications Plan

The Outreach Strategic Plan addresses communication from a high-level. Detailed communications strategies and schedules will be documented in the Communications Plan. A monthly speaking engagement schedule will be approved by the DHS OPS CIO. New media outlets will be explored such as blogs on the DHS public facing Internet site and other web based communications.



## Appendix A. Performance Measures Tracked in FYHSP

The current program performance measures in FYHSP contain one COP measure, one Mission Systems (MS) measure, and three HSIN measures. The OMB criteria for FYHSP include one outcome measure, one efficiency measure, and three output measures. All of the investment measures fall into the output category. OPS has additional operational measures that are used to meet the outcome and efficiency criteria.

These are all considered operational/investment level metrics. The following measures include all of the measures reported in FYHSP for the investments, but are only a sample of the measure reported in the Exhibit 300.

Measure	Description of Measure	Туре
COP - Number of hours the	Number of hours the COP system was down due to an	Output
DHS Common Operating	unplanned system outage (not including scheduled system	
Picture (COP) is not	maintenance, service upgrades, etc.).	
operational during the fiscal		
year due to unplanned		
downtime.		
	Scope (Range of Data)	
	The COP metrics received on a monthly basis from the	
	Operations & Maintenance (O&M) manager. The COP	1
	Program Manager (PM) tracks information with REMEDY	
	trouble ticket software. Range of data is actual number of	
	hours the system is unavailable due to unplanned outages.	
	System downtime is determined by dividing actual hours of	1
	unplanned downtime by total number of hours system should	
	be available (24 hours per day).	
	Data Source	
	The COP metrics received on a monthly basis from the OPS	1
	CIO Director and the COP Program Manager. The COP	
	Program Manager (PM) tracks information with REMEDY	
	trouble ticket software. Report is presented to Performance	
	Management Team in the form of a MS-PowerPoint template	1
	that shows the system downtime in bar charts.	
	Data Collection Methodology	
	Arrived at the baseline of 14 hours (the rolling average) of	
	downtime per month by taking the actual number of hours	
	system was down (due to unplanned outages) for the last	
	reporting period (Q3), 42 hours by total number of months in	
	reporting period, three months. With this as the baseline, the	
	system is only available 98%. To achieve 99.999% availability	
	(the system requirement), the system can only have 5 hours or	ļ
	.001% of unplanned downtime at most. The target for the	
	system is to reduce unplanned downtime to less than 5 hours	
	in the next fiscal year and each subsequent year until the goal	ł
	of 99.999% system availability is achieved.	
	Data Reliability Check	
	REMEDY time stamps the outage, indicating the amount of	
	time that COP is down.	



Measure	Description of Measure	Туре
HSIN - Percent of time the	Interruption (level zero) is defined as an incident that causes	Outpu
Homeland Security	total loss of all HSIN tools (portal, instant messaging, AMS,	
Information Network (HSIN)	databases, and mapping). Users are prevented from	
is fully operational.	performing tasks necessary for mission critical operations.	
	Failure requires immediate resolution as the complete system	]
	cannot be used until the repair has been made. Unplanned	
	downtime includes all system downtime that is unrelated to	
	scheduled system maintenance, service, upgrades, etc.	
	Scope (Range) of Data	1
	OPS must be prepared to manage crises when components	1
	or the nation's infrastructure have been compromised. OPS'	
	mission requires HSIN to perform when the nation is facing a	1
	potential threat against its citizens, leaders, and infrastructure.	
	This means that HSIN must be able to perform without	
	interruption of services regardless of internal and external	
	factors. The Program will measure its effectiveness at	
	providing services without interruption of more than 0.001%.	1
	Data Source	1
	Heip Desk log.	
	Data Collection Methodology	+
	Use Help Desk log to determine start and end of system	<u> </u>
	downtime. Subtract total downtime from total time 24/7/365	
	available in a year to get the amount of uptime. Divide	
	system uptime by amount of time in a year (525,600 minutes).	
	Data Reliability Check	
and a second	The Help Desk log tracks downtime from start to end to the	}
	nearest minute.	
Average purpher of house	Metric - Percentage of emergency requests responded to	Outou
Average number of hours taken to resolve each	within two hours by phone or within four hours in person. This	Outpu
	metric is only intended to measure those service requests that	
emergency service request for the Briefing Display	are considered "emergency".	
	are considered emergency.	
System, a component of Mission Systems.	Suntam quailability is an indicator of Situational Awaranaan	
mission systems.	System availability is an indicator of Situational Awareness.	
	Scope (Range) of Data After the request is determined to be an "emergency," the	
	measurement of response time is the time lapse between the	
	initial request and when the issue is resolved. This does not	
	include other service requests not classified as "emergency"	
	by the Knowledge Management Officers (KMOs) in the NOC.	
	Data Source	
	Service request tickets are entered and tracked in the	
	Infrastructure Maintenance Management System (IMMS). A	
	report is run from the system and this information is submitted	
	to the performance team for tracking. IMMS is a	
	comprehensive, web-enabled help desk and trouble ticketing	
	system that helps IT professionals easily manage user's	
	expectations by providing IT support personnel with the tools	
	they need to resolve issues quickly. Users and support	
	personnel can interact in real time to report, diagnose and	
	resolve issues from trouble ticket initiation to trouble ticket	
	closure.	

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Measure	Description of Measure	Туре
	Data Collection Methodology	
	Collected in the IMMS. Request is passed to the KMOs. The target is to	
	respond to all emergency requests within four (4) hours per the Service	
Percent of active HSIN users.	Level Agreement (SLA). The current baseline is at 100% and was set by	
	counting the total number of emergency service requests responded to	
	within the required time.	
	Data Reliability Check	
	Information is entered and stored in the IMMS, a fully operational issue	+
	tracking system from "cradle to grave" cycle. KMOs fill out request and	
	submit via the IMMS program and the contractor receives the request	
	which is date and time stamped. Upon completion of service, the KMO	
	enters notes on completion of the task into the IMMS. Any issues that	
	arose between the time the problem with the system is noted to the time	
	the problem is resolved is also documented within the system.	1
Porcont of		1 Outrue
	Percentage of active HSIN users is derived by dividing the number of	Outpu
	users who have accessed the system during the reporting period (the	
users.	quarter) divided by the number of total HSIN user accounts.	- <u> </u>
	Scope (Range) of Data	
	Includes Federal, state, local, tribal, territorial, public, private sector,	
active HSIN	international partners and other Government Agencies users that have	
	accessed the system during the reporting period.	
	Data Source	
	The HSIN software engineering group uses the Urchin software	
	application to identify the number of unique users in a given reporting	
Percent of active HSIN	period. A unique user is one who has logged onto the system at least	
	once during the reporting period. Someone who has logged on 50 times	
	using the same log-in information is counted as one (1) unique user.	
	Data Collection Methodology	1
	Urchin counts and stores the number of total log-ins on a daily basis. At	
	the end of the reporting period, the system compiles the statistics. The	1
	O&M Manager of the Technical Design Agent (TDA) Team selects the	
	statistics needed from a drop-down selection of configurable data reports.	{
	The number of unique users is distinguished from the total number of	
	HSIN user accounts. The number of unique users (active users) is	
	divided by the total number of HSIN accounts to get the percentage of	
	active HSIN users. TDA submits a quarterly HSIN Metrics report to the	
	OPS CIO Portfolio Management and Performance Management Team	
·····	that includes this metric.	ļ
	Data Reliability Check	<u> </u>
	The tools used to run the usage report have undergone configuration and	
	testing to ensure accurate data is supplied. The percentage calculated in	[
	the quarterly metrics report submitted by TDA is rechecked for accuracy	1
	by the OPS Performance Management Team.	
<b>Total</b>	Includes all (Federal, state, local, tribal, territorial, public, private sector,	Output
number of 👘	international partners and other Government Agencies.) user accounts	
ISIN user	within the HSIN system, including Desktop COP users.	
		ĺ
	Scope (Range) of Data	
	Includes Federal, state, local, tribal, territorial, public, private sector,	
	international partners and other Government Agencies	
	Data Source	
	AMS Report	



Measure	Description of Measure	Туре
	Data Collection Methodology	
	AMS	
	Data Rellability Check	
	AMS is the tool used to login. All users must be vetted by their chain of command, inserted by the Administrator, and be assigned a user name and password. AMS can count the user accounts without compromising user privacy.	

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## Appendix B. List of Acronyms

ACRONYM	DESCRIPTION
ADE	Acquisition Decision Event
ADM	Acquisition Decision Memorandum
ATO	Authority to Operate
AWN	Alerts, warnings & notifications
C&A	Certification and Accreditation
ССВ	Change Control Board
CDD	Content Discovery and Delivery
CFO	Chief Financial Officer
CIKR or CS	Critical Infrastructure and Key Resources – often called Critical Sector
CIIC	Criminal Intelligence Coordination Committee
cio	Chief Information Officer
COI	Community of Interest
CoP	Community of Practice
COP	Common Operating Picture
COTS	Commercial Off the Shelf
CPO	Chief Procurement Officer
CTISS	Common Terrorism Information Sharing Standards
CUI	Control Unclassified Information
DHS	Department of Homeland Security
DNI	Director of National Intelligence
DOD	Department of Defense
DOJ	Department of Justice
DRM	Data Reference Model
EA	Enterprise Architecture
EAB	Enterprise Architecture Board
EM	Emergency Management
ESM	Enterprise Service Management
EXSUM	Executive Summaries
FAA	Federal Aviation Administration
FAC	Federal Advisory Committee
Fed Ops	Federal Operations
FEMA	Federal Emergency Management Agency
FISMA	Federal Information Security Management Act
FRD	Functional Requirement Document



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## Homeland Security

FSAM	Federal Segment Architecture Methodology
FYI	For Your Information
GAC	Global Justice Advisory Committee
GAO	General Accounting Office
GDP	Gross Domestic Product
GFIPM	Global Federated Identity and Privilege Management
GSA	General Services Administration
HGC	HSIN Governance Committee
HIR	Homeland Intelligence Report
HIS	<b>"Homeland security information,"</b> as defined in section 482(f)(1) of the Homeland Security Act of 2002, means any information possessed by a Federal, State, local, or tribal agency that relates to (1) a threat of terrorist activity, (2) the ability to prevent, interdict, or disrupt terrorist activity, (3) the identification or investigation of a suspected terrorist or terrorist organization or any person, group, or entity associated with or assisting a suspected terrorist or terrorist organization, or (4) a planned or actual response to a terrorist act. Homeland Security
HMCC	HSIN Mission Coordinating Committee
HQ	Headquarters
HSIN	Homeland Security Information Network – A portal platform that provides a set of tools, and services that enable Homeland Security Information sharing and collaboration cross various different homeland mission areas and service gateway to other information sharing partners. HSIN is NOT a physical network infrastructure rather virtual information sharing network.
HSINAC	HSIN Advisory Committee
HSPD-5	······································
	Homeland Security Presidential Directive 5
HS SLIC	a second s
HS SLIC I&A	Homeland Security Presidential Directive 5
	Homeland Security Presidential Directive 5 Homeland Security State and Local Intelligence Community of Interest
I&A	Homeland Security Presidential Directive 5 Homeland Security State and Local Intelligence Community of Interest Office of Intelligence and Analysis – DHS Component
I&A IAEM	Homeland Security Presidential Directive 5 Homeland Security State and Local Intelligence Community of Interest Office of Intelligence and Analysis – DHS Component International Associate of Emergency Managers
I&A IAEM IC	Homeland Security Presidential Directive 5 Homeland Security State and Local Intelligence Community of Interest Office of Intelligence and Analysis – DHS Component International Associate of Emergency Managers Intelligence Community
I&A IAEM IC ICE	Homeland Security Presidential Directive 5 Homeland Security State and Local Intelligence Community of Interest Office of Intelligence and Analysis – DHS Component International Associate of Emergency Managers Intelligence Community Immigration and Customs Enforcement
I&A IAEM IC ICE IdAM	Homeland Security Presidential Directive 5 Homeland Security State and Local Intelligence Community of Interest Office of Intelligence and Analysis – DHS Component International Associate of Emergency Managers Intelligence Community Immigration and Customs Enforcement Identity Access Management
I&A IAEM IC ICE IdAM INS	Homeland Security Presidential Directive 5 Homeland Security State and Local Intelligence Community of Interest Office of Intelligence and Analysis – DHS Component International Associate of Emergency Managers Intelligence Community Immigration and Customs Enforcement Identity Access Management Immigration and Naturalization Service
I&A IAEM IC ICE IdAM INS IOC	Homeland Security Presidential Directive 5 Homeland Security State and Local Intelligence Community of Interest Office of Intelligence and Analysis – DHS Component International Associate of Emergency Managers Intelligence Community Immigration and Customs Enforcement Identity Access Management Immigration and Naturalization Service Initial Operating Capability
I&A IAEM IC ICE IdAM INS IOC IP	Homeland Security Presidential Directive 5 Homeland Security State and Local Intelligence Community of Interest Office of Intelligence and Analysis – DHS Component International Associate of Emergency Managers Intelligence Community Immigration and Customs Enforcement Identity Access Management Immigration and Naturalization Service Initial Operating Capability Office of Infrastructure Protection
I&A IAEM IC ICE IdAM INS IOC IP IPT	Homeland Security Presidential Directive 5 Homeland Security State and Local Intelligence Community of Interest Office of Intelligence and Analysis – DHS Component International Associate of Emergency Managers Intelligence Community Immigration and Customs Enforcement Identity Access Management Identity Access Management Immigration and Naturalization Service Initial Operating Capability Office of Infrastructure Protection Integrated Project Team
I&A IAEM IC ICE IdAM INS IOC IP IPT IRTPA	Homeland Security Presidential Directive 5 Homeland Security State and Local Intelligence Community of Interest Office of Intelligence and Analysis – DHS Component International Associate of Emergency Managers Intelligence Community Immigration and Customs Enforcement Identity Access Management Identity Access Management Immigration and Naturalization Service Initial Operating Capability Office of Infrastructure Protection Integrated Project Team Intelligence Reform and Terrorism Prevention Act of 2004

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	Information Sharing Coordinating Council - Coordination and action body for department-wide information sharing and collaboration related matters. Responsible for consolidation and vetting information sharing policies, strategies, and resources.
ISE	Information Sharing Environment
ISGB	Information Sharing Governance Board - Executive Steering Committee and decision-making authority for information sharing and collaboration issues. Among other things this body is the authority for Information Sharing Access Agreements, Memorandums of Agreements, and Memoranda of Understanding. Information Sharing Segment Architecture
IJJA	
JFO	Information Technology Joint Field Office
JRIES	
	Joint Regional Information Exchange System
LE	Law Enforcement "Law enforcement information" means any information obtained by or of
	mission. "Law enforcement information includes, but is not limited to, information pertaining to (a) an actual or potential criminal, civil, or administrative investigation or a foreign intelligence, counterintelligence, or counterterrorism investigation, (b) assessment of or response to criminal threats and vulnerabilities, (c) the existence, organization, capabilities, plans,
	intentions, vulnerabilities, means, methods, or activities of individuals or groups involved or suspected of involvement in criminal or unlawful conduct or assisting or associated with criminal or unlawful conduct, (d) the existence, identification, detection, prevention, interdiction, or disruption of, or response to, criminal acts and violations of the law, (e) identification, apprehension, prosecution, release, detention, adjudication, supervision, or rehabilitation of accused persons or criminal offenders, or (f) victim and
LEISP	intentions, vulnerabilities, means, methods, or activities of individuals or groups involved or suspected of involvement in criminal or unlawful conduct or assisting or associated with criminal or unlawful conduct, (d) the existence, identification, detection, prevention, interdiction, or disruption of, or response to, criminal acts and violations of the law, (e) identification, apprehension, prosecution, release, detention, adjudication, supervision, or
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	intentions, vulnerabilities, means, methods, or activities of individuals or groups involved or suspected of involvement in criminal or unlawful conduct or assisting or associated with criminal or unlawful conduct, (d) the existence, identification, detection, prevention, interdiction, or disruption of, or response to, criminal acts and violations of the law, (e) identification, apprehension, prosecution, release, detention, adjudication, supervision, or rehabilitation of accused persons or criminal offenders, or (f) victim and witness assistance. Law Enforcement Information Sharing Program
LEISS	intentions, vulnerabilities, means, methods, or activities of individuals or groups involved or suspected of involvement in criminal or unlawful conduct or assisting or associated with criminal or unlawful conduct, (d) the existence, identification, detection, prevention, interdiction, or disruption of, or response to, criminal acts and violations of the law, (e) identification, apprehension, prosecution, release, detention, adjudication, supervision, or rehabilitation of accused persons or criminal offenders, or (f) victim and witness assistance. Law Enforcement Information Sharing Program Law Enforcement Information Sharing Strategy
LEISS LEISS	intentions, vulnerabilities, means, methods, or activities of individuals or groups involved or suspected of involvement in criminal or unlawful conduct or assisting or associated with criminal or unlawful conduct, (d) the existence, identification, detection, prevention, interdiction, or disruption of, or response to, criminal acts and violations of the law, (e) identification, apprehension, prosecution, release, detention, adjudication, supervision, or rehabilitation of accused persons or criminal offenders, or (f) victim and witness assistance. Law Enforcement Information Sharing Program Law Enforcement Information Sharing Strategy Law Enforcement Information Sharing Service
LEISS LEISS M2M	intentions, vulnerabilities, means, methods, or activities of individuals or groups involved or suspected of involvement in criminal or unlawful conduct or assisting or associated with criminal or unlawful conduct, (d) the existence, identification, detection, prevention, interdiction, or disruption of, or response to, criminal acts and violations of the law, (e) identification, apprehension, prosecution, release, detention, adjudication, supervision, or rehabilitation of accused persons or criminal offenders, or (f) victim and witness assistance. Law Enforcement Information Sharing Program Law Enforcement Information Sharing Strategy Law Enforcement Information Sharing Service Machine-to-Machine
LEISS LEISS M2M MD	intentions, vulnerabilities, means, methods, or activities of individuals or groups involved or suspected of involvement in criminal or unlawful conduct or assisting or associated with criminal or unlawful conduct, (d) the existence, identification, detection, prevention, interdiction, or disruption of, or response to, criminal acts and violations of the law, (e) identification, apprehension, prosecution, release, detention, adjudication, supervision, or rehabilitation of accused persons or criminal offenders, or (f) victim and witness assistance. Law Enforcement Information Sharing Program Law Enforcement Information Sharing Strategy Law Enforcement Information Sharing Service Machine-to-Machine Management Directive
LEISS LEISS M2M MD MOA	intentions, vulnerabilities, means, methods, or activities of individuals or groups involved or suspected of involvement in criminal or unlawful conduct or assisting or associated with criminal or unlawful conduct, (d) the existence, identification, detection, prevention, interdiction, or disruption of, or response to, criminal acts and violations of the law, (e) identification, apprehension, prosecution, release, detention, adjudication, supervision, or rehabilitation of accused persons or criminal offenders, or (f) victim and witness assistance. Law Enforcement Information Sharing Program Law Enforcement Information Sharing Strategy Law Enforcement Information Sharing Service Machine-to-Machine Management Directive Memorandum of Agreement
LEISS LEISS M2M MD MOA MOC	intentions, vulnerabilities, means, methods, or activities of individuals or groups involved or suspected of involvement in criminal or unlawful conduct or assisting or associated with criminal or unlawful conduct, (d) the existence, identification, detection, prevention, interdiction, or disruption of, or response to, criminal acts and violations of the law, (e) identification, apprehension, prosecution, release, detention, adjudication, supervision, or rehabilitation of accused persons or criminal offenders, or (f) victim and witness assistance. Law Enforcement Information Sharing Program Law Enforcement Information Sharing Strategy Law Enforcement Information Sharing Service Machine-to-Machine Management Directive Memorandum of Agreement HSIN Mission Operators Committee
LEISS LEISS M2M MD MOA MOC MOU	intentions, vulnerabilities, means, methods, or activities of individuals or groups involved or suspected of involvement in criminal or unlawful conduct or assisting or assoclated with criminal or unlawful conduct, (d) the existence, identification, detection, prevention, interdiction, or disruption of, or response to, criminal acts and violations of the law, (e) identification, apprehension, prosecution, release, detention, adjudication, supervision, or rehabilitation of accused persons or criminal offenders, or (f) victim and witness assistance. Law Enforcement Information Sharing Program Law Enforcement Information Sharing Strategy Law Enforcement Information Sharing Service Machine-to-Machine Management Directive Memorandum of Agreement HSIN Mission Operators Committee Memorandum of Understanding
LEISS M2M MD MOA MOC MOU NEMA	intentions, vulnerabilities, means, methods, or activities of individuals or groups involved or suspected of involvement in criminal or unlawful conduct or assisting or assoclated with criminal or unlawful conduct, (d) the existence, identification, detection, prevention, interdiction, or disruption of, or response to, criminal acts and violations of the law, (e) identification, apprehension, prosecution, release, detention, adjudication, supervision, or rehabilitation of accused persons or criminal offenders, or (f) victim and witness assistance. Law Enforcement Information Sharing Program Law Enforcement Information Sharing Strategy Law Enforcement Information Sharing Service Machine-to-Machine Management Directive Memorandum of Agreement HSIN Mission Operators Committee Memorandum of Understanding National Emergency Management Association
LEISS M2M MD MOA MOC MOU NEMA NFPA	intentions, vulnerabilities, means, methods, or activities of individuals or groups involved or suspected of involvement in criminal or unlawful conduct or assisting or assoclated with criminal or unlawful conduct, (d) the existence, identification, detection, prevention, interdiction, or disruption of, or response to, criminal acts and violations of the law, (e) identification, apprehension, prosecution, release, detention, adjudication, supervision, or rehabilitation of accused persons or criminal offenders, or (f) victim and witness assistance. Law Enforcement Information Sharing Program Law Enforcement Information Sharing Strategy Law Enforcement Information Sharing Service Machine-to-Machine Management Directive Memorandum of Agreement HSIN Mission Operators Committee Memorandum of Understanding National Emergency Management Association National Fire Protection Association
LEISS M2M MD MOA MOC MOU NEMA NFPA NIEM	intentions, vulnerabilities, means, methods, or activities of individuals or groups involved or suspected of involvement in criminal or unlawful conduct or assisting or assoclated with criminal or unlawful conduct, (d) the existence, identification, detection, prevention, interdiction, or disruption of, or response to, criminal acts and violations of the law, (e) identification, apprehension, prosecution, release, detention, adjudication, supervision, or rehabilitation of accused persons or criminal offenders, or (f) victim and witness assistance. Law Enforcement Information Sharing Program Law Enforcement Information Sharing Strategy Law Enforcement Information Sharing Service Machine-to-Machine Management Directive Memorandum of Agreement HSIN Mission Operators Committee Memorandum of Understanding National Emergency Management Association National Fire Protection Association National Information Exchange Model

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NOC	National Operations Center
NPPD	National Protection and Programs Directorate – DHS Component
NRCC	National Response Coordination Center
NRF	National Response Framework
OCIO	Office of the Chief Information Officer
OPS	DHS' Office of Operations Coordination
PII	Personally Identifiable Information
PM-ISE	Program Manager for the Information Sharing Environment
POA&M	Plan of Action and Milestones
PSA	Protection Security Adviser
RFI	Request for Information
RRCC	Regional Response Coordination Centers
RSS	Regional Sharing Service
S/L	State and Local
SAML	Security Assertion Markup Language
SAR	Suspicious Activity Report
SitReps	Situation Reports
SLA	Service Level Agreement
SLTP	State, local, tribal and private sector
SMC	Shared Mission Community - Subject matter experts that develop Procedures, Plans, Coordination, Standards, and Resources in their areas of expertise. IPTs Identify issues, risks, and gaps.
SME	Subject Matter Expert
SOA	Services-Oriented Architecture
SOIS POA	Strategic Operations Information Sharing Plan of Action
SSO	Single Sign-On
Π	<b>"Terrorism information,"</b> as defined in section 1016(a)(4) of the Intelligence Reform and Terrorism Prevention Act of 2004, means all information relating to (1) the existence, organization, capabilities, plans, intentions, vulnerabilities, means of finance or material support, or activities
	of foreign or international terrorist groups or individuals, or of domestic groups or individuals involved in transnational terrorism, (2) threats posed by such groups or individuals to the United States, United States persons, or United States interests, or to those of other nations, (3) communications of or by such groups or individuals, or (4) groups or individuals reasonably believed to be assisting or associated with such groups or individuals.
TRM	groups or individuals involved in transnational terrorism, (2) threats posed by such groups or individuals to the United States, United States persons, or United States interests, or to those of other nations, (3) communications of or by such groups or individuals, or (4) groups or individuals reasonably
TRM TTP	groups or individuals involved in transnational terrorism, (2) threats posed by such groups or individuals to the United States, United States persons, or United States interests, or to those of other nations, (3) communications of or by such groups or individuals, or (4) groups or individuals reasonably believed to be assisting or associated with such groups or individuals.
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TTP	groups or individuals involved in transnational terrorism, (2) threats posed by such groups or individuals to the United States, United States persons, or United States interests, or to those of other nations, (3) communications of or by such groups or individuals, or (4) groups or individuals reasonably believed to be assisting or associated with such groups or individuals. Technical Reference Model Tactics, Techniques, and Procedures



USPER US Persons XACML Extensible Access Control Markup Language



# Homeland Security Information Network

# Requirements Management Plan

Version 1.1

Contract Number: HSHQPA-06-J-00418



#### **Revision History**

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09/22/2008	0.1	Initial Program level Requirements Management Plan	HSIN Program Management Office (Names Redacted)
11/04/2008	0.2	Update to correct typos and grammatical errors	HSIN Program Management Office (Names Redacted)
11/18/2008	0.3	Added "Change Control Process" Appendix and HSIN Governance Diagram	HSIN Program Management Office (Names Redacted)
11/21/08	0.4	Update to correct typos and grammatical errors	HSIN Program Management Office (Names Redacted)
11/24/08	0.5	Updates made based on Comments provided in Version 0.4	HSIN Program Management Office (Names Redacted)
12/9/08	1.0	CIO Updates incorporated	HSIN Program Management Office (Names Redacted)
02/20/09	1.1	CIO Updates incorporated	HSIN Program Management Office (Names Redacted)





## REQUIREMENTS MANAGEMENT PLAN Signature Page

HSIN/COP COTR,

I recommend approval and acceptance of the Requirements Management Plan.

l& m Raymond Melusky,

20<u>FEB09</u> Date

DHS HSIN OPS Organization Program

Sand Harry McDavid

DHS HSIN OPS CIO

<u>20 (2009</u> Date



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## **1** Overview

The Department of Homeland Security (DHS) Homeland Security Information Network (HSIN) evolved from an existing system, the Joint Regional Information Exchange System (JRIES). HSIN is a set of commercially secure (encrypted) web-based portals through which DHS provides real-time operation information and decision support, shares documents, supplies situational awareness and collaboration opportunities, and provides alerts, warnings and notifications. HSIN operates at the Sensitive but Unclassified (SBU) level.

The mission of the HSIN Next Generation upgrade is to provide a secure and trusted national platform for information sharing and collaboration between Federal, state, local, tribal, territorial, private sector and international partners engaged in preventing, protecting from, responding to and recovering from all threats, hazards and incidents within the authority of DHS.

Requirements Management as used in this document includes all facets of requirements engineering as depicted in the figure below from Karl E. Wieger's "When Telepathy Won't Do: Requirements Engineering Key Practices" whitepaper.

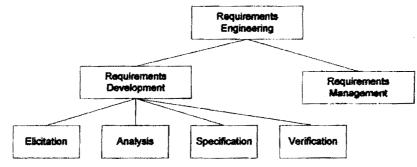


Figure 1 - Requirements Engineering Process

This HSIN Requirements Management (RM) Plan focuses on requirement development (from identification/elicitation through verification), while the HSIN Next Generation implementation vendor's documentation and CMMI process address the details of requirements management. The HSIN requirements management process has been designed to ensure that requirements from our Federal, state, local, tribal, and private sector partners are gathered and incorporated.

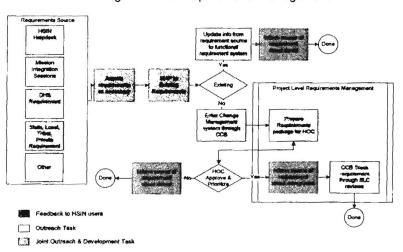
HSIN serves a diverse and complex user base. Requirements management is paramount in developing a solution that meets the DHS mission needs outlined in the Mission Needs Statement. HSIN requirements enter into consideration by the HSIN Management Team through a number of avenues. Mission Advocates from the HSIN Outreach Team are the primary contact point for end user requirements traced through business needs. Other governance boards and the Shared Mission Communities (SMC)s will also provide requirements. The HSIN helpdesk also receives requirements from end users. In addition, the DHS CIO's office provides technical requirements. All new requirements, those not outlined in the HSIN Next Generation Functional Requirements Document (FRD), must get vetted through proper HSIN oversight committees

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before entering into the HSIN development process. The HSIN development and O&M contractor prepares requirements packages for submission to the HSIN Mission Operator Committee (MOC). The MOC will start up in early 2009, after the charter is approved.

The diagram below depicts the HSIN process of requirements management. For detailed phase descriptions, refer to Section 3, Requirements Process.



**HSIN Program Level Requirements Management** 

Figure 2 - HSIN Program Level Requirements Management

#### 1.1 Purpose

The purpose of requirement management is to establish a common understanding of the technical and non-technical requirements addressed by the program between the customer and project or organization, within the project or organization, and throughout the lifecycle. The goals of requirements management are to ensure that requirements are controlled to establish a baseline for development, acquisition, or management; and to ensure plans, work products, and activities are consistent with the requirements.

The RM plan establishes an orderly method by which the goals of requirements management will be achieved. The plan also communicates essential information to project participants and helps contractors get up to speed. Consequently, the plan is a living document, which needs to be updated and supplemented as necessary.

#### 1.2 Scope

The HSIN Program requirements gathering and management process shall incorporate federal and industry best practices and standards associated with gathering, documenting, reviewing, validating, prioritizing, and preparing "go forward" decisions and all operational (i.e., business) requirements associated with the use of the HSIN platform throughout the mission areas of DHS

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and its strategic domestic security partners. The process shall translate operational requirements into functional and non-functional system and technical requirements to support engineering and implementation efforts for future system definition and enhancements.

The scope of the plan answers the questions:

- What must be done?
- How it will be done?
- Who will perform various activities?
- When will they be performed
- What level of requirement quality must be achieved?

All projects within this program will provide detailed requirements management plans aligned with this plan.

#### 1.3 Applicability

This document will be used by the Program Manager to ensure that requirements across all projects are gathered, tracked, prioritized, and implemented following a consistent and auditable process. Contractors must prove to the Program Manager that their requirements tools and processes align with this document and the DHS System Engineering Life Cycle (SELC).

#### 1.4 Document Organization

The document is organized into the following major sections.

Section	Description
1. Overview	Describe HSIN program and the scope of the requirements management process.
2. Roles and Responsibilities	Identify Roles and Responsibilities of those involved in this management process.
3. Requirements Process	Describe the processes and procedures to be used during this management process.
4. Tools	Identify the tools used for this management process.
5. Requirements Documentation and Organization	Identify the artifacts developed for this management process.
6. Measures	Identify the controls necessary to manage this process.
7. Reports	Describe the outputs of the process management controls.

#### 1.5 Applicable Documents

- HSIN Program Management Plan
- HSIN Program Configuration Management Plan
- DHS SELC



#### 1.6 Changes and Revisions to THIS PLAN

The HSIN Program Manager and his support team are responsible for updates to this document. All changes will be communicated to the HSIN Program Management Office (PMO). This document will be managed in accordance with the policies established in the HSIN Program Configuration Management Plan.

#### 1.7 Issues

- The DHS Office of Operations Coordination and Planning (OPS) Chief Information Officer (CIO) Division has not yet finalized their guidelines for requirements management. This Plan aligns with the DHS SELC and industry best practices. When the OPS CIO Division finalizes policies and processes for requirements management, the HSIN Program Manager and his support team will adjust this plan accordingly.
- OPS leadership is working to establish the MOC to provide requirements oversight. Other boards may be involved in the requirements vetting and prioritization process, but these relationships require additional development.



## 2 ROLES AND RESPONSIBILLITIES

#### 2.1 Organization Overview

The HSIN Program Manager must manage all user requirements and must ensure the system conforms to the DHS Enterprise Architecture Standards and the designated target architecture. The following table lists the roles and responsibilities of the individuals and teams responsible for all aspects of requirements management associated with the HSIN Program.

Participatit	$\Theta_{A,B}(q_{1}) < \gamma_{1}(q_{1}) < \gamma_{1}(q_{1})$
OPS CIO	• Validates that the project has sufficiently detailed requirements to enter the Design stage
	<ul> <li>Validates that all SELC exit criteria have been met</li> </ul>
	Approves/disapproves projects to proceed to Design stage
DHS IT Portfolio	<ul> <li>Validates that IT Portfolio objectives have been appropriately documented in requirements</li> </ul>
Manager(s)	• Identifies/validates if an overlap of functionality exists between the project and investments/systems in the IT Portfolio
Component EAB	• Validates that the requirements are aligned with the Component EA
Project Sponsor	<ul> <li>Validates that the project is aligned with the project's objectives</li> <li>Validates that the project is within cost, schedule, and performance constraints</li> </ul>
	Validates that all risks are defined and manageable
Project Manager	• Responsible for working with the customer to identify all requirements; is responsible for submitting the customer's requirements to the Configuration Control Board for analysis and impact
	• Responsible for communicating requirements impact to the customer
	• Responsible for negotiating requirements modification when needed
	• Responsible for delivery of the Test Analysis Report to the customer
Business Sponsor	• Validates that the requirements accurately and completely reflect the business needs
	• Certifies on the SDR Approval Letter that the requirements satisfy the business need
ISSO	<ul> <li>Validates that the requirements appropriately document security requirements</li> </ul>
Functional	Maps business requirements to functional requirements
Requirements	• Prepared new requirement for the change management process
Lead	Updates requirements management tool
System Design Manager	• Validates that the requirements are sufficiently defined such that design can begin with minimal re-work of functional requirements

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the strain prover	$2\epsilon_{12}\epsilon_{23}\epsilon_{23}\epsilon_{33}\epsilon_{$
HSIN Mission Operator Committee	• Responsible for approving/disapproving requirements passed from the HSIN Requirements IPT
HSIN Requirements Manager	<ul> <li>Responsible for maintaining a matrix of all customer approved requirements</li> <li>Responsible for oversight of the requirements change control process</li> <li>Responsible for applying changes to requirements matrix</li> <li>Responsible for maintaining the modification history of requirements</li> </ul>
QA/Test Manager	<ul> <li>Responsible for verifying that the delivered product satisfies the approved requirements</li> <li>Responsible for documenting the results of the requirements verification in a Test Analysis Report.</li> </ul>
IV&V Team	Responsible for validating Program adherence to this plan

The HSIN Program relies on advisory councils and other information sharing groups to ensure that the system is correctly mapped to Department goals and missions. The figure below depicts the relations between HSIN and these governance boards and committees.

An improved DHS Information Sharing Governance Framework leverages previous efforts, particularly the establishment of the DHS Information Sharing Governance Board (ISGB) and the DHS Information Sharing Coordination Committee (ISCC) executive bodies, incorporates a segment architecture approach, and creates the appropriate structures and touch points for strong mission operator involvement. This framework provides the mechanisms to support HSIN development and direction necessary for decision-making and community buy-in. Through this governance structure, the HSIN management team can address information sharing policy issues, gather community specific requirements, and solicit feedback from multiple mission groups.

DHS will provide the resources necessary to support and sustain the Shared Mission Committees (SMC)s and the HSIN Mission Operators Committee (MOC), both comprised of mission operators. The SMCs primarily consist of operators who provide mission requirements and have the ability to reach out to their state and local contacts for requirements. The MOC will be comprised of voting members, representatives from each SMC, and non-voting members, representatives from policy, finance, legal affairs, security, compliance, the HSIN Program, IT, etc.

The HSIN Concept of Operations (CONOPS) and business case describe in detail how the governance bodies work with the HSIN Program.

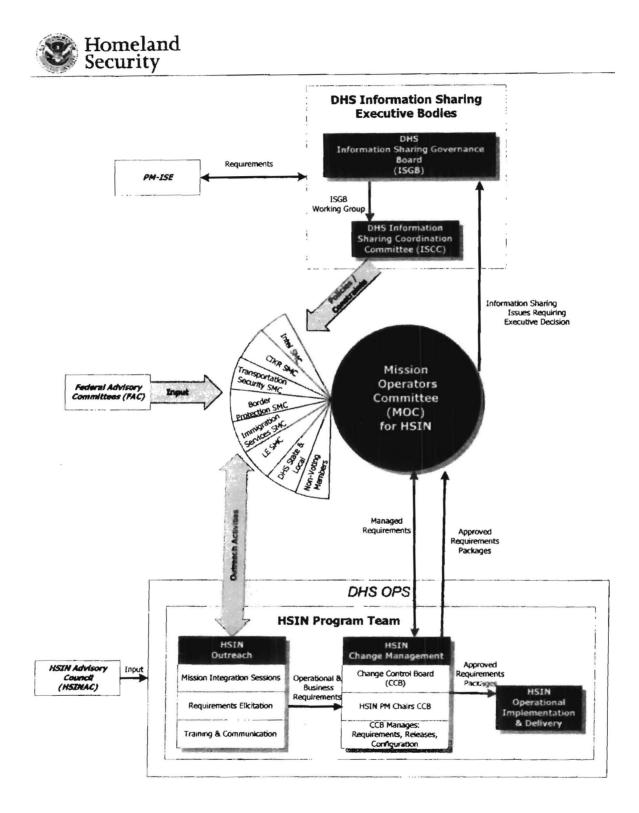


Figure 3 - HSIN Governance Model

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## 3 REQUIREMENTS PROCESSES

This HSIN RM Plan documents the process and responsible owners for all aspects of requirements management at the Program level. Requirements management involves tracking all requirements from inception to user acceptance. The Program Team must work with external governance bodies to validate and prioritize requirements.

#### 3.1 Overview

RM involves all project teams working on the HSIN Program. The figure below outlines the work flow as requirements move from user input through change management and the approval process. Though requirements are generated from multiple sources:

- HSIN Mission Operators Committee
- DHS Shared Mission Communities (SMCs)
- HSIN Outreach Team

The Operations and Maintenance (O&M) Team captures user requirements and manages minor updates between major system development efforts. The functional requirements lead works with the Outreach team to translate the work flows and business requirements into functional requirements. The functional requirements lead then works through the SELC phases managing requirements to user acceptance. All new requirements will enter into the change management system to be vetted and prioritized by the HMSS.



Figure 4 - Requirements Work Flow

#### 3.1.1 Phase One - Mission Integration Session

The Outreach Team elicits operational requirements through stakeholder engagement strategy sessions. During these elicitation sessions, an Outreach Team Mission Advocate lead runs through selected scenarios to gain an understanding of the information sharing and collaboration methods currently employed by the new or existing HSIN partner. The Mission Advocate and his team document the relevant workflows and business/operational requirements. Any distinct request for system functionality will be traced back to an operational need during these sessions. All documentation will be developed using the Microsoft Office tool suite and adhering to

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Configuration Management (CM) policies established within the HSIN Program Configuration Management Plan.

Next the outreach team develops use cases incorporating HSIN, or a suggested interface to HSIN, with the workflows/business requirements collected earlier. Refer to the Outreach Strategic Plan for details on the Mission Integration engagement sessions. All documentation will be developed using the Microsoft Office tool suite and adhering to Configuration Management (CM) policies established within the HSIN Program Configuration Management Plan.

As mentioned previously, requirements are generated from a variety of sources. The Outreach and O&M teams will work together to collect and analyze new requirements gathered from outside of the formal elicitations sessions. As of the start of FY09, no new requirements will be sent to the MOC for consideration without a valid mapping by to an operational need related to the DHS mission.

#### 3.1.2 Phase Two - Requirements Mapping

Outreach Team members work with a functional requirements lead to map the business requirements from the use cases to the existing FRD already loaded into the automated tracking tool. HSIN Next Generation is using the DOORs system from Telelogic to manage functional requirements. The requirements that cannot be mapped to the existing FRD are treated as new requirements. A requirements package is then be sent to the Change Control Board (CCB). The HSIN development and O&M contractor prepare the requirements package for CCB. This includes the uses cases, the mapping to the functional and technical requirements, and a level of effort summary.

#### 3.1.3 Phase Three - Requirement Change Management

The CCB reviews the requirements package and ensures completeness. It works with the HSIN development team to ensure that documentation is accurate and complete. The CCB then sends the package to the MOC for vetting. The CCB, together with the HSIN PM, a HSIN business representative, and a HSIN technical representative presents and supports the requirements to the MOC. The requirements package flows through the change process as documented in the HSIN Program Configuration Management Plan. Refer to Appendix C of this document for the CCB Process.

#### 3.1.4 Phase Four - Requirements Approval and Prioritization

The requirements approval board, currently the MOC, will vet the new requirements with constituents. The board deliberates the value of the updates and provides findings back to the CCB.

#### 3.1.5 Phase Five – Requirements Gate Reviews

All approved requirements are loaded into the automated requirements tracking tool. The CCB works with the HSIN PM to track the requirements through the mandatory SELC review gates and review boards. The CCB tracks the new requirements through the final OPS CIO Engineering Change Review (ECR) before implementing the update to the production system.



## 4 TOOLS

Currently, HSIN does not have a single, distinct tool for managing requirements from business process workflows to implementation. Initial business process workflows and use cases will be managed in accordance with the Configuration Plan using the document management capabilities of the current HSIN platform and the CHARTS application.

Functional and technical requirements are managed in the DOORS tool according to approved requirements management and configuration management plans.

## **5 REQUIREMENTS DOCUMENTAION AND ORGANIZATION**

#### 5.1 Requirements Documentation

The strategy for developing HSIN requirements aligns to the DHS Enterprise Architecture and SELC Methodology, and includes building upon the following primary SELC artifacts:

Document	Current Status
Mission Need Statement	Updated for May 2008 MDP1 Review
Business Case (OMB Exhibit 300)	Updated July 2008 for yearly OMB submission
Alternatives Analysis	Updated July 2008 as part of the Business Case (OMB Exhibit 300) submission
Cost Benefit Analysis	Part of OMB Exhibit 300 (needs additional work)
Lifecycle Cost Estimate	Updated and submitted for review August 2008
CONOPS	Last version Spring 2006
<b>Operational Requirements Document</b>	Not available

The table below illustrates the prioritized SELC activities/artifacts to be generated as part of the activities leading up to the Systems Requirements Review. The security documents are loaded in the Trusted Agent FISMA (TAF) tool.

	Governing Authority	SLC Stages									
ARTIFACT			Planning	Laquiremanta Definition	Design	Development	ningration &	mplementation	1 Lucitor	Disposition	
Environmental Impact Statement	IRP (MD 1400)			C/F				and the second second	12		
Operational Requirements Document (ORD)	DHS SLC			С	V	U	U	U	F	F	
1 Service Level Agreements	DHS SLC			C	11			U	F		
2 Ste Prep Plan	DHS SLC			C	F				10 1 N 1 1		
3 Requirements Traceability Matrix (RTM)	DHS SLC			С	1	U	U	U	F	F	
4 Test and Evaluation Master Plan (TEMP)	DHS SLC			C	U	F					
5 Security Requirements Traceability Matrix (SRTM)	DHS CISO			С	U	F					
Plan of Action & Milestone (POA&M)	DHS CISO			C	U		U	F	1		
7 System Security Plan (SSP)	DHS CISO			C	U	Ü	U	F	NO. SHOULD BE		
8 Contingency Plan	DHS CISO				U		F		(2) S. (1) - (1) - (2)		
9 Disaster Recovery Plan	DHS SLC			C	U		F		Sec. 1. 1. 1.		
0 Security Risk Assessment (SRA)	DHS CISO			C	U		F		Contraction of the		
1 Security Test & Evaluation (ST&E) Plan	DHS CISO			С		F					
2 Map to the Data Architecture	DHS EA Process			C	1		U	U	F	Ē	
NIEM IEPD Document	DHS SLC			C	U	U	U	F			
Map to Technical Reference Model	DHS EA Process	-		C			U	U	F	F	
System Definition Review Approval Letter	DHS SLC			C/F	100						

C = Create; F = Finalize, and U = Update

#### 5.1.1 Breakdown Structures

HSIN Program requirements are labeled either as operational, functional, or technical. The operational requirements represent high-level technology independent user descriptions of information sharing business processes related to information sharing. The functional requirements represent high-level needs for capabilities that an information sharing system needs to fulfill the operational requirements. The technical requirements represent lower level requirements from both the users and the Department.

Operational requirements management:

• All operational requirements must trace back to a business need that aligns with the DHS mission. These requirements represent business processes that are not tied to a specific technology. No new HSIN requirements will be considered on the program unless they can trace back to a business need. The HSIN Outreach Team will first document operational requirements during their mission integration session. Any requirements received from other sources must trace back to operational requirements.

Functional requirements management:

• Functional requirements represent the next step in decomposing user system requirements. High-level functionality must align with operational requirements to provide the desired capability.

Technical requirements management:

• Technical requirements represent the lowest level requirements with the highest level of granularity. These requirements must be detailed enough and precise enough to allow the developers to configure the system or code a solution.

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#### 5.1.2 Associated Information

Each requirement has associated metadata to facilitate tracking and traceability. As larger business requirements are decomposed into functional elements, a link is established via the metadata. Initially metadata is included with the original business requirements. The DOORs tool must map back to requirements sources.

Associated Information	Use	Captured By
Source	Community of interest for requirement	Outreach Team
Change history	Change control and audit	RM Tool
Priority	Implementation planning	Oversight
-		Committee
Unique ID	Traceability matrix	RM Tool

#### 5.2 Organization

#### 5.2.1 Numbering Convention

Currently, new requirements are numbered and tracked outside of a formal tool. Use cases are labeled with the community of origin, date, source (HD: Helpdesk, MI: Mission Integration Session, DHS: DHS requirement, OT: other), and user friendly name. Example: VA\_EOC\_092508\_MI\_Flood\_Emergency\_Management.doc

Once the MOC has approved a requirement, it is then entered into the automated tracking tool as a functional requirement. The tool provides the numbering convention.

#### 5.2.2 Traceability Strategy

The Requirements Traceability Matrix (RTM) is created to map each detailed functional requirement to its source and is updated throughout the system life cycle. The RTM provides traceability from business requirements and other sources to the FRD and into the test cases. As the life cycle progresses, additional traceability is added from the FRD to the System Requirements Document (SRD), into high-level design elements, detailed design components, and test cases and procedures.

#### 5.2.3 Repository Structure

Use cases and business requirements are stored within a program workspace on the current HSIN platform. Folders are created for each of the COIs interviewed by the Outreach Teams.

Functional and technical requirements are managed by the vendor requirements management tool.



## **6 MEASURES**

The Program tracks the time taken for new requirements to pass through the phases outlined in Section 3 of this report.

The number of new functional requirements (those not included in the HSIN Next Generation FRD) are tracked along with the forecasted additional costs associated with the requirements.

## 7 REPORTS

Requirements reporting is incorporated into the monthly program performance report and briefing. Some requirement reports are listed below. (examples should be generated from the tool when possible).

- Traceability Matrix
- Unallocated Requirements
- Requirements by Risk
- Requirements by Priority
- Requirements by Qualification Method
- Requirements Status
- Cumulative Changes
- Other Requirement Metrics Reports