

NOAA/NESDIS



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OFFICE OF SYSTEM ARCHITECTURE AND ADVANCED PLANNING (OSAAP) MANAGEMENT PLAN

October 2017



Prepared by:

U.S. Department of Commerce

National Oceanic and Atmospheric Administration (NOAA)

National Environmental Satellite, Data, and Information Service (NESDIS)



**NESDIS
Procedural
Requirements**

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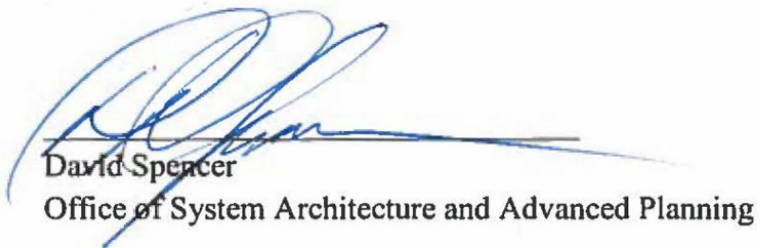
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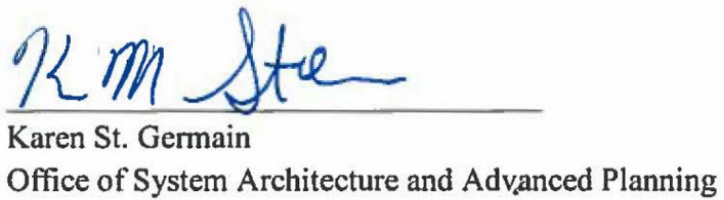
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PREFACE

P.1 PURPOSE

The Office of Systems Architecture and Advanced Planning (OSAAP) was established to provide strategic planning for NESDIS in a consistent, collaborative, and efficient way. The following document provides the responsibilities OSAAP will take and the methods it will use to meet them as part of the NESDIS mission.

As stated in the 2016 NESDIS Strategic Plan, the NESDIS mission is to “...provide secure and timely access to global environmental data and information from satellites and other sources to both promote and protect the Nation’s environment, security, economy and quality of life.”

P.2 SCOPE

This document:

- a. Defines OSAAP’s responsibilities
- b. Describes the functions needed to meet these responsibilities
- c. Presents the processes/groups needed to execute these functions and their cadence.
- d. Identifies membership and roles for the processes/groups

P.3 APPLICABILITY

This document applies to OSAAP operations as an office within NESDIS. If any conflicts exist between this plan and directives or policy at the NESDIS, NOAA, of Dept. of Commerce levels, those higher level directives and policies take precedence.

P.4 AUTHORITY

OSAAP was approved by NOAA as reflected in the following documents:

- a. NOAA Circular 15-05 12/31/2014
- b. NOAA memorandum 13-028947 dated: 3/13/2013
- c. DDO 25-5 “proposed draft”

P.5 OBSOLESCENCE

This document shall be reviewed and updated every three years, or sooner if special circumstances warrant.



CHAPTER 1: Mission and Vision Statements

1.1 Mission Statement:

OSAAP manages NESDIS system architecture and advanced planning efforts to deliver sustainable, robust, and adaptive systems and services that meet NESDIS customer needs.

1.2 Vision Statement:

OSAAP is a strategic organization that develops and sustains an Enterprise mission capability enabling NESDIS to work as an efficient team in a consistent disciplined framework. "OSAAP Charts the Course".



CHAPTER 2: Responsibilities

To assure the NESDIS mission, OSAAP has responsibilities that fall into the following categories:

2.1 Strategy:

- a. Govern the NESDIS Enterprise architecture to ensure it enables the achievement of strategic goals and objectives;
- b. Provide stewardship across NESDIS in the implementation and effectiveness of meeting its Strategic Plan.

2.2 Consistency:

- a. Develop and manage policies and processes for effective implementation of program management and system engineering throughout NESDIS;
- b. Provide independent assessment to the NESDIS decision authority for KDPs and other milestones to ensure systematic compliance with the architecture, and effective implementation of Level 0 and 1 requirements;

2.3 Prioritization:

- a. Manage NESDIS Level 0 and Level 1 Requirements to ensure NESDIS will acquire the right capabilities;
- b. Lead the implementation of the enterprise risk and opportunities management process to ensure NESDIS is properly addressing vulnerabilities and possibilities.

2.4 Communication:

- a. Validate enterprise performance to ensure delivered products and services effectively and efficiently meet the needs of the NOAA customer community within the NESDIS scope;
- b. Serve as technical liaison for communication of the enterprise architecture to outside agencies to ensure a single, unified voice for the NESDIS way ahead and to understand mission partner needs;

2.5 Chief Engineer:

By executing these system engineering responsibilities, the Director of OSAAP is recognized as the Chief Engineer for NESDIS.

2.6 Portfolio Manager:

As an extension of the system architecture and advanced planning responsibilities listed above, the OSAAP Director serves as the portfolio manager for architecture planning and responsive adaptation. This portfolio includes architecture-level trades, technology demonstration and insertion efforts for space and ground systems, rapid product utilization, and commercial data demonstrations.

CHAPTER 3: Functions

The following section describes the functions of how OSAAP plans to execute its responsibilities.

3.1: Govern the NESDIS Enterprise Architecture:

OSAAP will govern the NESDIS Enterprise architecture to ensure it enables the achievement of strategic goals and objectives

- 3.1.1 Serve as the chief architect for the NESDIS enterprise (from observations to delivery of mission data products).
- OSAAP ensures the overall integrity and functional effectiveness of the NESDIS Enterprise Architecture to support achievement of its vision and goals. The architecture includes mission systems and enabling enterprise capabilities.
 - The architecture will address the needs and expectations of the various members of NOAA's environmental observation community as they pertain to NESDIS, see Figure 1. The architecture encompasses smaller enterprises segments such as Observational, Ground, Science, Data and Information.

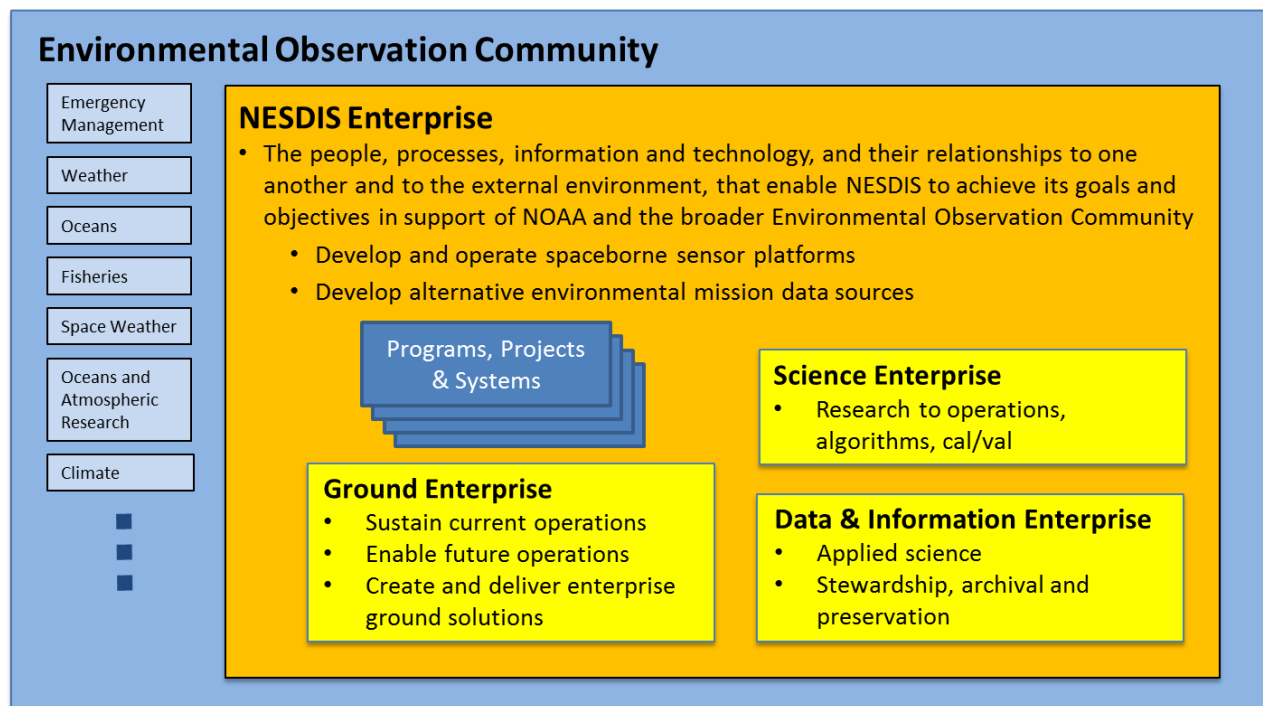


Figure 1: Relationship of the NESDIS Enterprise Architecture to the Environmental Observational Community



3.1.2 Lead enterprise-level architecture studies.

- a. OSAAP will identify present and future mission and enterprise needs, trends, capabilities, and vulnerabilities, and define the architecture drivers associated with them. To do this, OSAAP will lead the definition and prioritization of all NESDIS Enterprise Architecture needs and capabilities in collaboration with other NESDIS Offices and key stakeholders, including mission partners, NOAA's environmental observation community, and NOAA/NESDIS management.
- b. Working with the observational community, OSAAP will develop and coordinate architecture assessments based on established needs and the results of trade studies. These assessments will serve as the basis for development of NESDIS Level 0 requirements that flow to each major program, project or system.
- c. Orchestrate and perform architecture studies and trades in collaboration with the affected NOAA and NESDIS Offices to define and allocate enterprise capabilities to relevant programs, projects, and systems. Perform reliability analyses, architecture effectivities, gap and obsolescence assessments, as well as identify opportunities for commercial data usage and new technology development and insertion. These efforts support strategic direction, and balance the demands of high technical quality with cost, schedule, and logistical constraints.

3.1.3 Manage implementation of architecture features and functions

- a. Lead and manage the NESDIS Enterprise Architecture Committee (NEAC). See Section 3.1.5.
- b. Support NESDIS by assessing proposed changes to Level 0 and Level 1 requirements for impacts to its architecture.
- c. Assess opportunities for insertion of technology and risk mitigation solutions into the NESDIS Enterprise Architecture and requirements baseline, and in support of the Technology Planning and Integration for Observations' (TPIO) observational needs assessment process.
- d. Define, document, and manage enterprise systems engineering processes for development and evolution of the NESDIS Enterprise Architecture.
- e. Define, document, and manage a process to maintain configuration control of the NESDIS enterprise architecture. The architecture design will be under change control through the NESDIS Configuration Management process. Each NESDIS Office will derive its architecture from the NESDIS Enterprise Architecture and maintain configuration control with its own CM system.



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- 3.1.4 Support the NESDIS budget strategy and formulation process, and the concept definition of acquisition programs to meet NESDIS mission objectives by:
- a. Developing Architecture plans, trades, and alternatives, and identifying commensurate risks based on budget planning needs.
 - b. Providing technical support to budget planning
 - c. Reviewing and prioritizing enterprise architecture unfunded requirements.
- 3.1.5 Manage the evolution of NESDIS enterprise and system capabilities
- a. Establish, maintain, and Chair the NESDIS Enterprise Architecture Committee (NEAC) that will guide, direct and oversee execution of Enterprise Planning process for NESDIS.
 - (1). The NEAC is comprised of systems architects from affected NESDIS Offices, including ACIO-S.
 - (2). The NEAC supports the Strategy and Resources Management Board (SRMB) as defined in the NESDIS Governance and Strategic Management Plan. The NEAC will advise the SRMB on status of the NESDIS Enterprise Architecture and changes to be made.
 - (3). The NEAC will coordinate with the Information Resource Management and Advisory Committee (IRMAC) when NESDIS Enterprise Architecture changes are being considered that could impact items related to the scope of that body. The NEAC will provide a liaison to the IRMAC to monitor its plans and activities to identify items that could impact the NESDIS Enterprise Architecture.
 - (4). The NEAC will assess and vet Level 0 and Level 1 requirement deviation and waiver requests against the Architecture baseline for the NOAA Observing Systems Council (NOSC) as outlined in Section 3.3
 - (5). The NEAC will recommend organizational changes to NESDIS management in order to support current and future architecture needs.
 - b. OSAAP will conduct an annual NESDIS Enterprise Architecture Review to assess performance capability gaps or other deficiencies. Following the review, solicit impact statements from affected programs and projects, and/or use the identified gaps/deficiencies to develop and propose new enterprise architectures, missions, Programs or projects.
- 3.1.6 Define and document NESDIS Enterprise Architecture metrics to be used as the basis for assessment of progress in meeting strategic goals, objectives, and requirements. These metrics will include measures of success, economic value, and value to NESDIS stakeholders.

3.2: Develop and Manage NESDIS Policies and Processes

OSAAP will develop and manage policies and processes for effective implementation of program management and system engineering throughout NESDIS:

3.2.1 Lead the effort to develop and manage a consistent set of NESDIS enterprise best practices for policies, processes, guidelines, and criteria that enable successful execution of NESDIS developments, acquisitions, operations, archiving, and stewardship. Figure 2 provides an initial list

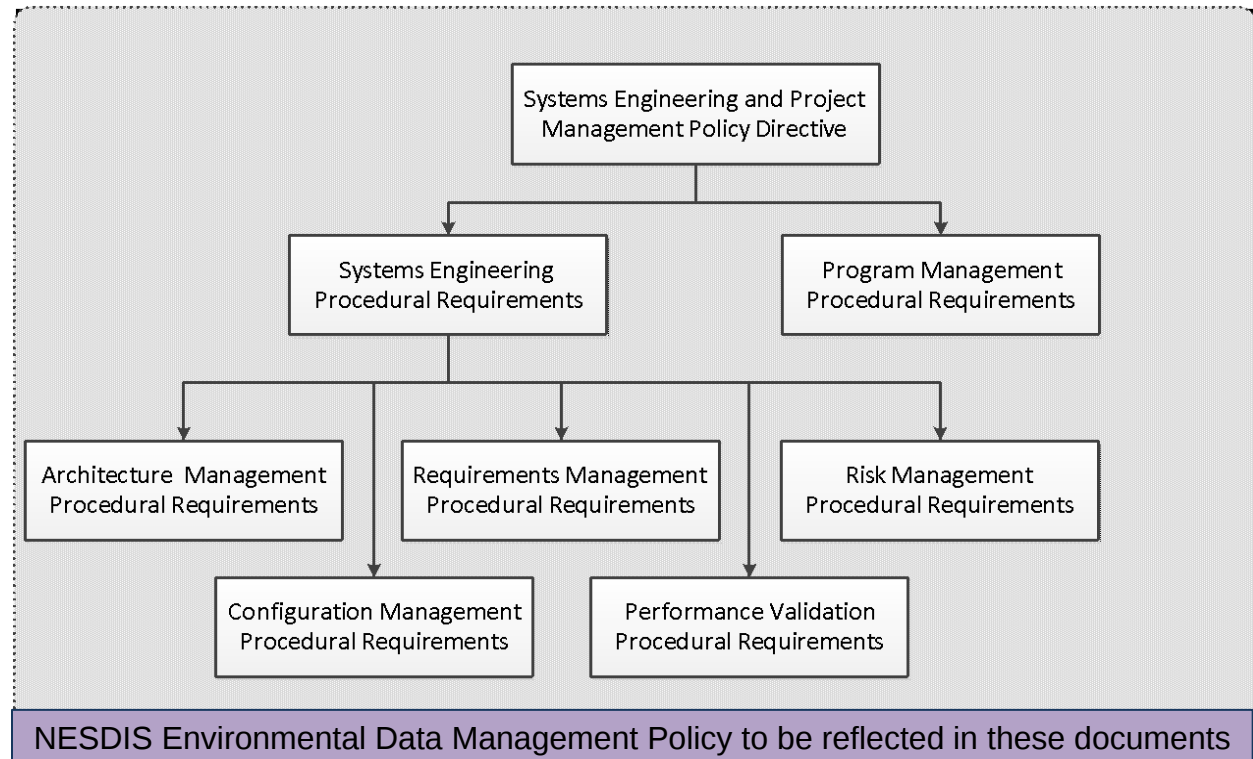


Figure 2: Planned Policies and Practices

3.2.2. Establish working groups as needed to develop these methods. The working groups will be comprised of representatives from NESDIS Offices to include: OSGS, OSPO, STAR, NCEI, OPPA, GOES R, JPSS, and ACIO-S. This approach leverages the heritage and expertise inherent in these Offices through collaboration that will expand and evolve current practices and processes into consistent and actionable methods that all of NESDIS can use. It is understood that GOES R and JPSS will retain their current baselined policies, processes, and documentation since changing at this stage in their development would be cost prohibitive. However, these programs will have much to offer certain working groups in lessons learned. Initially Systems Engineering, Program Management, and Data Management working groups will be established. Others may be developed as needed (e.g. Architecture Governance, Performance Validation, etc.).



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- a. Systems Engineering Working Group (SEWG): OSAAP will establish and lead a Systems Engineering Working Group. At a minimum, the SEWG will create and maintain policies and processes for Systems Engineering Procedural Requirements, Milestone Review Criteria, Risk Management, Configuration Management, and Requirements Management consistent with the NESDIS Systems Engineering Procedural Requirements.
 - b. Program Management Working Group (PMWG): OSAAP will establish and lead a Program Management Working Group. The PMWG will create and maintain policies and processes to include, but not limited to, the following areas: Program and/or Project Management Plans, Budgeting and Scheduling Criteria, Life Cycle and Key Decision Points, Quality Assurance Policy and Criteria, Statement of Work Template, and Contract Data Requirements List (CDRL).
 - c. The SEWG and PMWG will establish policies, processes, guidelines, and criteria to be included in the documents defined in preceding sections (see Figure 2). OSAAP is responsible for writing NESDIS level documents, and each NESDIS Office is responsible for writing its top level documents.
 - d. The SEWG and PMWG will meet as often as needed to develop these documents in time to support NESDIS' needs. Once products are developed, these working groups will meet quarterly to discuss lessons learned and update products as necessary. This continuous assessment will reduce inefficiency and promote communication and consistency across NESDIS.
 - e. Data Management Working Group (DMWG):
 - (1). OSAAP will lead NESDIS' efforts to comply with the NESDIS Environmental Data Management Planning Policy (NPD 6010.01A). OSAAP will do this in a manner that advances these practices and processes through collaboration across NESDIS. To do this, OSAAP will establish and lead a Data Management Working Group that will:
 - (2). Provide guidance for the development of NESDIS Environmental Data Management Plans and review and approve the final documents.
 - (3). Advise the OSAAP Director regarding compliance of NESDIS Data Management Plans and activities with the NESDIS Environmental Data Management Planning Policy.
 - (4). Monitor the implementation of approved NESDIS Environmental Data Management Plans.
 - (5). Identify issues and risks, and make recommendations to IRMAC for IT initiatives that support approved EDM Plans.
 - (6). Work in consultation with the NOAA Environmental Data Management Committee, the NOAA Science Advisory Board Data Access and Archive Requirements Working Group, and the NESDIS Information Resources Management Advisory Committee.
 - f. Working Group Guidance:
 - (1) Each working group will develop its terms of reference to provide a detailed framework for the function and scope of its activities.
 - (2) When documents are nearing their obsolescence date, working groups will review them for accuracy and effectiveness.

- (3) Documents will be developed in a generic fashion for application to any future NESDIS program or vendor to meet specific program needs, constraints, or acquisition approaches. The focus of these documents should be on what is required by NESDIS. How the requirements will be implemented will be defined in Office and lower level documentation.
- (4) A tailoring process to meet specific program needs must be established.
- (5) Tools and modeling applications change over time. They are implementations of these processes that do not influence the processes and policies themselves. Therefore the policies and processes shall not reference specific tools or modeling applications.
- (6) Working groups are encouraged to leverage existing government/international agency documents, extracting the best practices applicable to NESDIS.
- (7) The personnel supporting the working groups must remain stable to maintain heritage knowledge and provide consistent points of view. However, a delegated alternate should be established for the few times attendance by a primary representative is not possible.
- (8) The working groups will maintain the same level of document purview that OSAAP has. They will develop NESDIS-level documentation, and review the next lower-level documents for consistency with the NESDIS level documentation. Documentation developed for lower tier use is not part of the working group's purview (See Figure 3).

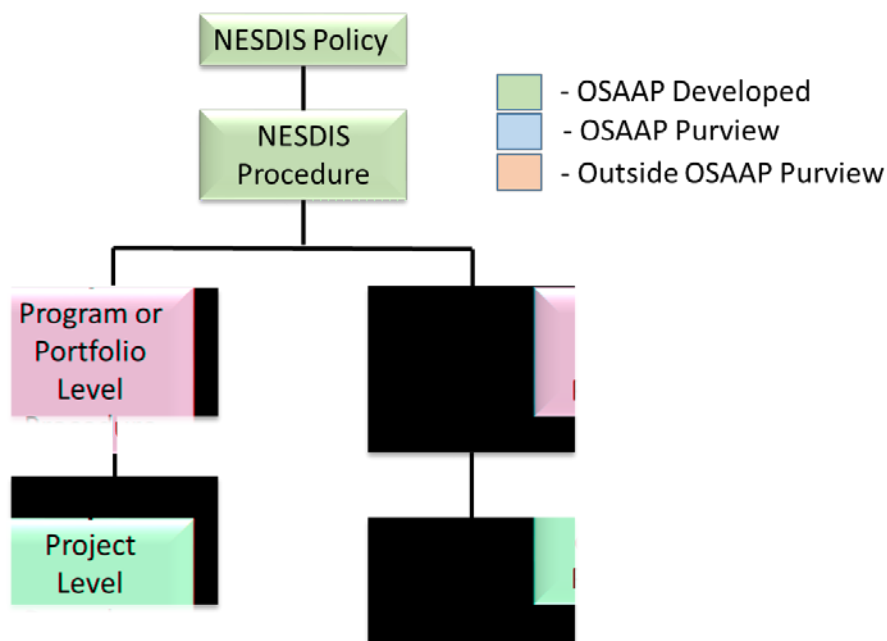


Figure 3: OSAAP Purview beneath NESDIS Level Documents



3.2.3 Establish and manage a configuration control process for NESDIS-enterprise documentation.

- a. The Director of OSAAP is responsible for managing the Configuration Control Board (CCB) that reviews all NESDIS enterprise-level documentation and requirements for release and revision. Enterprise-level documentation consists of directives, policies, processes, guidelines, and requirements that affect NESDIS as a whole, interfaces between NESDIS Offices, and interactions with NOAA offices.
- b. OSAAP will establish and maintain a repository accessible to all of NESDIS for the documents under control of the CCB. The repository shall have the ability to restrict and change access, as needed, to specific areas depending on the scope, maturity, or sensitivity of the artifacts in it.
- c. The Chair of this Board is the AA of NESDIS, or a designee.
- d. The members of this board will be the Directors of each NESDIS Office, including ACIO-S and OGC, or their designees.
- e. The SEWG, PMWG, and DMWG members may serve as technical review teams for the configuration control board as needed. Other reviewers can be invited to support the CCB as needed.
- f. Details of the CCB process are provided separately in '*NESDIS Configuration Management Procedural Requirements*' (See Figure 2).
 - (1). This procedural requirement will establish the standard list of signatories for NESDIS-level documents and the process to review and approve them. It will also establish the minimum acceptable signatory criteria, the process for collection and disposition of comments, and for dissemination of changes that affect lower level documentation.
 - (2). The Configuration Management Plan will provide criteria and content for lower-level Configuration Control Plans.

3.2.4 Establish a means to capture lessons learned from past performance and codify them in policies and procedures as necessary.

3.3: Manage NESDIS Level 0 and Level 1 Requirements

OSAAP will manage NESDIS Level 0 and Level 1 Requirements to ensure NESDIS will acquire the right capabilities:

3.3.1 Establish and maintain a process for the management and verification of NESDIS enterprise (Level 0) requirements, as well as development, management, and verification of NESDIS Office top-level (Level 1) requirements, to align NOAA goals and objectives with the NESDIS organization, its strategic plan, laws, partnership agreements, and its programs/organizational elements. These requirements establish:

- a. NESDIS performance and functional requirements
- b. Performance requirements flowed from NESDIS to its Offices
 - (1) Interfaces between NESDIS Offices
 - (2) Interfaces between NESDIS and its customers

An example of a preliminary requirements approval process is shown in Figure 4.

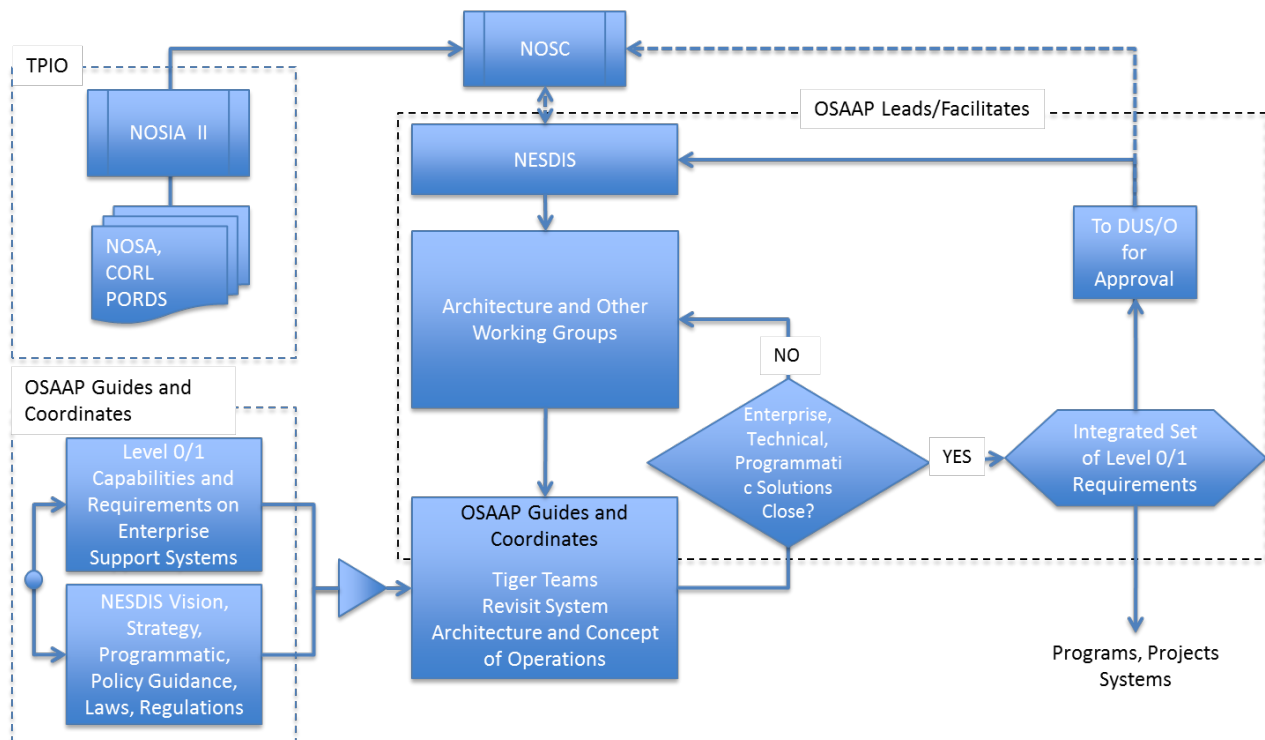


Figure 4: Example Requirements Approval Process

3.3.2 Definitions:



- a. Level 0 requirements define customer goals and objectives in the context of the NESDIS mission, strategic plans, performance, Mission Essential Functions (MEFs), policies, laws, and regulations.
- b. Level 1 requirements define expectations for NESDIS Offices' performance, functions, interfaces, and constraints consistent with NESDIS Level 0 requirements and the NESDIS Enterprise Architecture.

3.3.3 Implement a process under the NEAC to assess, prioritize, and adjudicate new Level 0 requirements and submit recommendations and results to the NESDIS AA. New Level 0 requirements are provided to OSAAP by the NESDIS AA. OSAAP will communicate with other NOAA Line Offices and the NOSC to assess their needs and gain inputs from them.

3.3.4 Manage Level 1 requirement development, validation, traceability, adjudication, and verification.

- a. In developing Level 1 requirements, OSAAP will ensure that they are actionable, measurable, and understandable, can be flowed from and to lower level requirements, and are realistic within available resources.
- b. OSAAP will manage the Level 1 Process and flow them to the recipient Offices. OSAAP will be steward of the Level 1 requirements once accepted by the recipient Offices. Level 1 requirements will be further decomposed and allocated by the recipient Offices. OSAAP is responsible for ensuring that the recipient Offices understand their Level 1 requirements so that accurate Level 2 and lower requirements can be derived and flowed.
- c. OSAAP is not responsible for the derivation and management of requirements beneath Level 1. Requirements below Level 1 are managed by the recipient Office. Each Office requirements management process will ensure that OSAAP reviews Level 2 changes for assessment against meeting the Level 1 parents.
- d. Definitions:
 - (1) Validation declares, with corroboration by customers/stakeholders, that the requirement is correct, i.e. "Is this the right requirement?"
 - (2) Verification is a confirmation, with supporting evidence, that requirements have been met.
- e. OSAAP is responsible for approving Level 1 verification methods, and determining that the verification event is appropriate. OSAAP is responsible for verifying that Level 0 and 1 requirements have been satisfied. To the extent possible, this should be done as part of the recipient's own verification process so that OSAAP imposes a minimum of extra effort and cost.
- f. Traceability: OSAAP will implement and manage a requirements traceability process that:
 - 1) maps NESDIS Level 0 requirements to Level 1 requirements, 2) maps Level 0 and 1



requirements to verification methods and events, and 3) maintains change history records from previous revisions. Recipient Offices, Programs, or Projects are responsible for showing traceability from Level 1 to lower level requirements, as well as ensuring their requirements process provides for OSAAP approval of Level 1 verification method and event.

- g. OSAAP will attend major Program/Project milestones to ensure that Level 0 and 1 requirements continue to be properly flowed, tracked, and managed.
- h. OSAAP will establish and manage a process through the NEAC to vet and assess NESDIS Level 0 Deviation/Waiver requests to the NESDIS AA and appropriate Milestone Decision Authority (MDA) for impacts to architecture and the NESDIS user community. The recommendation provided by OSAAP will include the ramifications of approving or not approving the request and a course of action.
 - (1) A Deviation is a documented authorization releasing a program, or project, from meeting a requirement before the requirement is put under configuration control at the level the requirement will be implemented.
 - (2) A Waiver is a documented authorization releasing a program, or project, from meeting a requirement after the requirement is put under configuration control at the level the requirement will be implemented.
 - (3) The deviation/waiver request must identify effectivity, i.e. does it apply to a single build, or the entire development? If the request is approved for the entire development, then consideration must be made to change the requirement to reflect the new condition.
- i. The details of how the OSAAP-led NESDIS-level requirements management process will be executed is provided separately in NESDIS '*Requirements Management Procedural Requirements*' document (see Figure 2).

3.4: Validate Enterprise Performance

OSAAP will validate enterprise performance to ensure delivered products and services effectively and efficiently meet the needs of the NOAA customer community within the NESDIS scope:

3.4.1 Validate NESDIS enterprise performance with the NESDIS customer and user community on a regular basis to ensure that customer needs and NESDIS strategic goals are being met.

- a. In this context, 'performance' is defined by the NOAA customer and user community's perception of how well NESDIS is meeting its commitments. This can be from a functional, service, or data product perspective.
- b. The NESDIS customer and user community includes NOAA Line Offices, international and government partners, other government agencies, academia, and any other user of NESDIS data and services that are of interest.



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- c. The validation process will involve interviewing customer and user community organizations to assess their satisfaction with NESDIS performance, service, and the quality and assurance of NESDIS products. These interviews will occur at different frequencies depending on the customer. The interviewing teams will be established as needed, will be led by OSAAP, and will consist of representatives from affected NESDIS and NOAA Offices.

3.4.2 Team with the NESDIS Offices to develop a process with the objective of maximizing the return on investment of existing programs by assessing how effectively NESDIS data products are utilized.

- a. To aid in the process, current performance will be assessed against the following areas to identify potential changes to the Enterprise:
 - (1). NESDIS strategic plan, goals, and objectives,
 - (2). Internal and external stakeholder, data products, capabilities, capacities, and coverages
 - (3). Potential threats to and vulnerabilities of the NESDIS architecture,
 - (4). Business and partnership agreements,
 - (5). Internal operational efficiencies and gaps,
 - (6). Mission partner plans and expectation
- b. The process will identify relative priorities and extent of potential Enterprise changes derived from the assessment. It will provide tangible measures of success in terms that relate to the stakeholder concerns. These measures of success must be able to support decision making, and be turned into actionable requirements. These measures of success and the requirements that derive from them must be validated with the affected stakeholders.
- c. The process should assess the value of current products. The value of a product is the ratio of cost to produce the product versus its economic value. Products deemed no longer of sufficient value to generate will have a retirement plan developed by OSAAP with support from the NESDIS Offices.

3.4.3 Implement a process to review requests for developing new or upgraded products. If the current product is sufficient according to the customer, this constitutes a strong case for making no changes.

3.4.4 Establish a NESDIS internal validation process that utilizes the support of NESDIS scientists or teams as principal investigators (PIs) to be ‘stewards’ of an approved data product or data product category. This process will ensure PIs are involved in the entire development life cycle of the hardware/software that supports the data product from requirement development, formulation, design, testing, and operations. Because the NESDIS PIs are experts in the application of these products, this process ensures that NESDIS products support the needs of the NOAA customer community, and provides consistent guidance throughout the development



process. This internal validation process will inform and support other validation efforts such as data products usage, retirement, and value added assessments with external stakeholders.

3.4.5 Update Level 0 or Level 1 requirements affected by the validation process in the OSAAP-led NESDIS requirements management process.

3.5 Lead the Implementation of the Enterprise Risk Board

OSAAP will lead the implementation of the Enterprise risk and opportunities management process to ensure NESDIS is properly addressing vulnerabilities and possibilities.

- a. The NESDIS Assistant Administrator has established a Risk Management process, and delegated responsibility for its implementation to the Director, OSAAP, per NQP-0203. In this capacity, the OSAAP Director will ensure that: (i) risk-related considerations for Enterprise systems, including authorization decisions, are viewed from an Enterprise-wide perspective with regard to the overall strategic goals and objectives of the organization; and (ii) the risk management approach is 1) consistent across the Enterprise, and 2) reflects the Enterprise's risk tolerance.
- b. OSAAP will implement the NESDIS risk and opportunities process per NESDIS *Risk Management Procedural Requirements* (NQP-0203) (See Figure 2).

3.6 Provide Independent Assessment to the NESDIS Decision Authority

OSAAP will provide independent assessment to the NESDIS decision authority for KDPs and other milestones to ensure systematic compliance with the architecture, and effective implementation of Level 0 and 1 requirements:

- a. For Key Decision Points (KDPs) in the development of NESDIS systems, OSAAP will assess compliance with architecture implementation and Level 0/1 requirements and provide its recommendation to the appropriate NOAA/NESDIS decision authority. OSAAP will also assess other NESDIS system development milestones that transfer authority between NESDIS Offices (e.g. Operational Readiness Reviews), or establish a requirements baseline (e.g. System Requirements Reviews), to ensure that requirements continue to be properly managed and understood, and that compliance with the NESDIS architecture plan is being maintained
- b. As needed, OSAAP will support review teams, and attend mission-level status reviews of NESDIS programs to provide independent assessments of program preparedness to NESDIS management.

3.7 Serve as Technical Liaison for the Enterprise Architecture

OSAAP will serve as technical liaison for communication of the enterprise architecture to outside agencies to ensure a single, unified voice for the NESDIS way ahead and to understand mission partner needs:



- a. OSAAP will communicate with U.S. government and international organizations, industry, and the public, on the NESDIS enterprise architecture design and implementation plans to foster understanding.
- b. This will be accomplished by taking advantage of existing fora, meetings, and conferences that provide the opportunity to reach out to interested organizations. Specific visits and exchanges will also be conducted as needed or directed by the NESDIS AA. Information from these interactions may be input to the Enterprise performance validation process described in Section 3.4 and used to affect the architecture design.

3.8 Provide Stewardship of the NESDIS Strategic Plan

OSAAP will provide stewardship across NESDIS in the implementation and effectiveness of meeting its Strategic Plan:

- a. Establish and maintain an evaluation process that advises NESDIS management on the accomplishment of its goals and objectives.
- b. OSAAP's evaluation will be done by assessing achievement against the projected outcomes from the NESDIS Strategic Implementation Plan (SIP) for the 1 to 2 year, and 3 to 5 year epochs. The SIP outcomes are intended to be challenging and impactful, yet realistic. OSAAP will assess if NESDIS progress toward achieving these outcomes, and provide recommendations for improvement to the AA. This evaluation will be accomplished using OSAAP personnel and focused interaction with SIP leads throughout NESDIS.

3.9 Portfolio Manager

OSAAP will manage the portfolio for Architecture Planning and Responsive Adaptation

- a. The Director, OSAAP will manage the portfolio for NESDIS Enterprise architecture planning, technology maturation and insertion efforts, and demonstrations of new methods of ingesting and utilizing data. Specifically, these tasks include architecture-level trades, technology insertion efforts for space and ground systems, technology demonstrations for space and ground systems, rapid product utilization, and commercial data demonstration projects. The portfolio responsibility includes budgeting and planning for these efforts, which will be performed in conjunction with NESDIS management and the NESDIS CFO as part of the existing fiscal planning process.
- b. The Director of OSAAP will manage the NESDIS budget resources within this portfolio and adjust funding based upon need and risk to the architecture and NESDIS. Resources may be adjusted based upon lessons learned in the execution of these projects, and the understanding gained of the value to NESDIS as the project matures. This will be done by chairing regular Program Management Reviews (PMRs) for each effort, then assessing the overall performance of the portfolio to determine if adjustments are necessary.



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- c. The day-to-day management of the projects in this portfolio will be done outside of OSAAP by Offices assigned by the NESDIS AA.
 - d. OSAAP will be responsible for the successful integration and implementation of these projects within the NESDIS architecture. This entails working with the executing Office to develop reasonable plans to implement the effort within cost and schedule in support of the master architecture plan and technology roadmap.
 - e. OSAAP will develop and maintain a NESDIS Enterprise Integrated Master Schedule (IMS) that combines inputs from appropriate program and project schedules. This IMS will also include the development items in OSAAP's portfolio. By combining NESDIS developments into one schedule, the Enterprise IMS will show progress on NESDIS architecture implementation, and identify critical path to get to final architecture readiness. It will also allow for schedule conflict resolution across all NESDIS developments. OSAAP will update the IMS monthly, and review and assess it for inconsistencies, risks, gaps, opportunities, and conflicts. OSAAP will provide its findings to the NESDIS AA on a monthly basis.



Chapter 4: Summary

OSAAP will provide strategy, consistency, prioritization, and communication to NESDIS, by meeting its responsibilities of architecture governance, strategic plan stewardship, standard policies and processes, decision authority support, requirements and risk management, performance validation, architecture liaison, and portfolio manager of architecture planning and responsive adaptation efforts. To do this, OSAAP will use an efficient, collaborative approach with NESDIS Line Offices that minimizes bureaucracy, makes maximum use of existing governing bodies and standing meetings, and employs small focused working groups to effectively develop and manage NESDIS-level processes.