



U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

ORDER
1800.66A

National Policy

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SUBJ: Configuration Management Policy

This order prescribes requirements to perform Configuration Management (CM) for National Airspace System (NAS) products and facilities. CM functions consist of CM Planning and Management, Configuration Identification, Configuration Change Management, Configuration Status Accounting, Configuration Verification and Audit, and Data Management. The performance of CM functions ensures consistency between the functional and physical attributes of a NAS product or facility with its requirements, design, and configuration information throughout its lifecycle. This order aligns baseline management activities for NAS products and facilities to the Acquisition Management System lifecycle phases and contractual milestones.

This order recognizes:

- The Air Traffic Organization, AJO-0000, Chief Operating Officer as the authority to charter and approve the NAS Configuration Control Board (CCB).
- The NAS CCB as the governance authority responsible for establishing and maintaining NAS-level baselines. The NAS CCB has the authority to charter subordinate CCBs as necessary. The NAS CCB monitors and provides oversight of CM ensuring consistent application of CM functions across all NAS domains and Service Areas for the products or facilities under their adjudication authority.

A handwritten signature in black ink, appearing to read "Billy Nolen", is positioned above the printed name.

Billy Nolen
Acting Administrator

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Chapter 1. General Information

1. Purpose of This Order. This order prescribes requirements to perform Configuration Management (CM) for National Airspace System (NAS) products and facilities. CM functions consist of CM Planning and Management, Configuration Identification, Configuration Change Management, Configuration Status Accounting (CSA), Configuration Verification and Audit (CVA), and Data Management. The performance of CM functions ensures consistency between the functional and physical attributes of a NAS product or facility with its requirements, design, and configuration information throughout its lifecycle. This order aligns baseline management activities for NAS products and facilities to the Acquisition Management System (AMS) lifecycle phases and contractual milestones.

2. Audience. This order applies to all employees and contractors at all levels of the Air Traffic Organization (ATO), ATO Service Units, and Federal Aviation Administration (FAA) Staff Offices engaged in the FAA AMS lifecycle for NAS products, equipment, infrastructure, and facilities.

3. Where Can I Find This Order? You can find an electronic copy of this order on the Directives Management System (DMS) website:

https://employees.faa.gov/tools_resources/orders_notices/ or go to the MyFAA Employee website, select 'Tools and Resources', then select 'Orders and Notices.'

4. What This Order Cancels. This order cancels:

- FAA Order 1800.66, Configuration Management Policy
- FAA Order 1800.67, NAS Change Proposal (NCP) Process Support of the Safety Management System (SMS)

5. Explanation of Policy Changes. This is a full revision of FAA Order 1800.66. This revision applies the following changes:

a. Clarifies accountabilities and separates the CM requirements from the procedural information.

b. Applies SAE International, Electronic Industries Alliance (EIA)-649 – Configuration Management Standard, as the framework for updating FAA Order 1800.66 requirements to reflect adherence to industry standards and best practices in compliance with the National Technology Transfer and Advancement Act (NTTAA). Table 1. CM Policy Terminology Changes identifies updates to the terminology used in FAA Order 1800.66, CHG 3.

Table 1. CM Policy Terminology Changes

| 1800.66 CHG 3 Terminology | 1800.66A Terminology |
|---|---|
| System | NAS |
| <ul style="list-style-type: none"> • Subsystem • Subsystem Variant • Service • Investment • Asset | Product |
| Facility, such as: <ul style="list-style-type: none"> • Air Route Traffic Control Center • Air Traffic Control System Command Center • Airport Traffic Control Tower • Combined Center Radar Approach Control • Contract Towers • Terminal Radar Approach Control | Facility |
| <ul style="list-style-type: none"> • Integrated Product Teams (IPT) • Solution Provider • Program Office | Acquirer Acquiring Offices |
| Configuration Item (CI) Owner | Configuration Control Board (CCB) |
| <ul style="list-style-type: none"> • Operational Support Service (AOS) • AOS NCP Coordinator | Baseline Manager Baseline Management |
| <ul style="list-style-type: none"> • Regional Coordinator • NCP Coordinator • Prescreening Coordinator • CM Coordinator | CCB CM Coordinator Organizational CM Coordinator |
| <ul style="list-style-type: none"> • Vendor • Contractor • Prime Contractor • Prime Equipment Vendor | Supplier |
| <ul style="list-style-type: none"> • Must Evaluator • Evaluator | NCP Evaluator |

c. This order identifies when baselines should be established in alignment with the FAA AMS lifecycle and contractual milestones, reference chapter 4.

d. This order reinforces the requirement for organizations or programs that acquire or manages baselines of products or product CIs intended for use in the NAS to establish a CM Plan, reference chapter 3.

e. This order introduces an Enterprise Product Identifier (EPI). The EPI establishes traceability and a crosswalk between the program and the product; the product and operational activities for the product; the Enterprise Architecture (EA) and the Master Configuration Index (MCI), and other data and information systems of record.

f. This order segments the NCP process into three phases:

(1) Case File Origination and Prescreening

(2) NCP Evaluation and Adjudication

(3) Configuration Control Decision (CCD) Implementation and Action Closure

g. This order clarifies scopes used within the NCP process and introduces an Administrative scope, reference chapter 5.

h. This order updates the Reasons for Change used within the NCP process, reference chapter 5.

6. Scope. This order is applicable to the performance of CM functions in the ATO, ATO Service Units, and FAA Staff Offices for the NAS architecture. This order augments the general standards governing the organization, preparation, and revision of directives as contained in the latest editions of FAA Order 1000.36, FAA Writing Standards, and FAA Order 1320.1, FAA Directives Management.

Chapter 2. Roles and Responsibilities

This chapter identifies the roles and responsibilities within the FAA as they pertain to the performance of CM functions. CCB Co-Chairs and CCB permanent members perform inherently governmental functions, as described in AMS Procurement Guidance, Chapter T3.8.2, Service Contracting, therefore, these roles must be performed by a federal employee. Delegation of authority for the CCB Co-Chair and CCB permanent members must be to a federal employee.

1. ATO. The ATO Chief Operating Officer, AJO-0000, supports the standard application of CM functions throughout all Service Units and Staff Offices and authorizes the NAS CCB.

2. ATO Service Units. ATO Service Units performing CM functions at all levels must enforce compliance with this order. All ATO Service Units or frontline teams that participate in Configuration Change Management activities, as identified in chapter 5, must identify the point(s) of contact (Organizational CM Coordinator) who will maintain the organization's CM profile and coordinate the organization's participation in the NCP process within the official CM information system. Representatives of Service Units must participate as permanent members of a CCB when designated by the CCB charter.

ATO Service Units must ensure non-federal facilities used in NAS operations comply with the requirements of FAA Order 6700.20, Non-Federal Navigational Aids, Air Traffic Control Facilities, and Automated Weather Systems in Terminal, Tower, and En Route operational environments. FAA-developed specifications that levy requirements on non-federal facilities must be placed under configuration control in accordance with chapter 5.

a. Safety and Technical Training, AJI-0000

(1) Ensure the minimum SMS criteria and standards for the interoperability of Safety Risk Management (SRM) and Safety Assurance are met for NAS changes at all levels per FAA Order 1000.37, Air Traffic Organization Safety Management System, and the latest edition of the ATO SMS Manual.

(2) Participate in the NCP process for national, local, and test scope NCPs as a safety evaluator to ensure potential safety impacts to the NAS are addressed and provide recommendations to Case File Originators in resolving safety-related comments.

b. Program Management Organization, AJM-0000

(1) Perform baseline management activities in accordance with Chapter 4 and Chapter 5.

(2) Develop and prepare product configuration information in accordance with FAA standards.

(3) Initiate the NCP process when establishing and modifying baselines for NAS products and when impact analysis identifies a change required that affects the form, fit, or function of an existing product configuration item.

(4) Support integration of CM into related processes, including the AMS, system engineering, resiliency, logistics, information security, quality assurance, Test and Evaluation (T&E), SMS, personnel safety, security, contracting, disposal, and NAS data release processes.

(5) Perform SRM with relevant stakeholders and/or Subject Matter Experts (SME) to assess the safety of proposed NAS changes in accordance with the latest edition of the SMS Manual and Chapter 5.

(6) Store and maintain program acquisition artifacts and baseline documentation within a secure Program Support Library (PSL).

(7) Store and maintain software-related artifacts and software version documentation within a secure Software Development Library (SDL).

(8) Maintain traceability and consistency between the NAS architecture and the products identified for configuration control in the MCI.

(9) Complete assigned CCD actions and perform status accounting activities for products under the organization's purview per Chapter 6.

(10) Maintain the accuracy of product configuration information within the MCI via the NCP process.

c. System Operations Services, AJR-0000. Participate in the NCP process to ensure operational oversight of NAS management initiatives and mitigate security issues that may affect the NAS.

(1) Enforce compliance with the requirements of this order when performing CM functions at all levels.

(2) Support integration of CM into related processes, including the AMS, system engineering, resiliency, logistics, information security, quality assurance, T&E, SMS, personnel safety, security, contracting, disposal, and NAS data release processes.

(3) Maintain traceability and consistency between the NAS architecture and the products identified for configuration control in the MCI.

(4) Perform SRM with relevant stakeholders and/or SMEs to assess the safety of proposed NAS changes in accordance with the latest edition of the SMS Manual and chapter 5.

(5) Store and maintain program acquisition artifacts and baseline documentation within a secure PSL.

(6) Store and maintain software-related artifacts and software version documentation within a secure SDL.

(7) Complete assigned CCD actions and perform status accounting activities for products under the organization's purview per chapter 6.

(8) Maintain the accuracy of product configuration information within the MCI via the NCP process.

d. Mission Support, AJV-0000

(1) Enforce compliance with the requirements of this order when performing CM functions for shared technical and program services that interface with the NAS architecture.

(2) Participate in the NCP process to provide oversight of change proposals to NAS products, facilities, and services that interface with Mission Support product CIs.

e. Air Traffic Services, AJT-0000

(1) Enforce compliance with the requirements of this order when performing CM functions for air traffic services.

(2) Participate in the NCP process to evaluate proposed changes to configuration-controlled NAS products, Terminal, Tower, and En Route operational field environments, including new hardware, software, airspace, and procedure designs.

f. Technical Operations, AJW-0000

(1) Vice President (VP) of Technical Operations Services — Designated FAA CM authority who provides oversight of the NAS CM program and reports the state of CM to executive management.

(2) Enforce compliance with the requirements of this order when performing CM functions at all levels.

(3) Support integration of CM into related processes, including the AMS, system engineering, resiliency, logistics, information security, quality assurance, T&E, SMS, personnel safety, security, contracting, disposal, and NAS data release processes.

(4) Maintain traceability and consistency between the NAS architecture and the products identified for configuration control in the MCI. Assign configuration identifiers, reference chapter 4.

(5) Plan, fund, manage and execute the facility configuration audits of En Route facilities in accordance with the latest edition of FAA Order 6470.33, Control of Power and Space, and Environmental Interfaces at En Route Air Traffic Control Facilities.

(6) Perform SRM with relevant stakeholders and/or SMEs to assess the safety of proposed NAS changes in accordance with the latest edition of the SMS Manual and chapter 5.

(7) Support all ATO Service Units in the performance of all CM functions. Provide and maintain the CM Manual, which must contain standard operating procedures and guidance to perform the requirements and ensure consistent application of CM functions.

(8) Provide role-based CM training in the FAA electronic Learning Management System (eLMS) that is inclusive of CM theory, methodologies, and best practices.

(9) Perform formal and informal audits of product and facility configurations in accordance with chapter 7.

(10) Provide Quality Control of CM data and information provided during the NCP process to ensure completeness and compliance with FAA standards, supplemental orders, and this order.

(11) Store and maintain program acquisition artifacts and baseline documentation within a secure PSL.

(12) Store and maintain software-related artifacts and software version documentation within a secure SDL.

(13) Maintain this policy in accordance with the latest edition of FAA Order 1320.1.

3. FAA Staff Offices.

a. FAA Staff Offices. FAA Staff Offices performing CM functions at all levels must enforce compliance with this order. All Staff Offices that participate in Configuration Change Management activities, as identified in chapter 5, must identify the point(s) of contact (Organizational CM Coordinator) who will maintain the organization's CM profile and coordinate the organization's participation in the NCP process within the official CM information system. Representatives of Staff Offices must participate as permanent members of a CCB when designated by the CCB charter.

b. Joint Resources Council (JRC). The JRC is the FAA's investment decision authority and designates products entering the AMS as NAS or Mission Support.

(1) A JRC representative must serve as a permanent member of the NAS CCB.

(2) Enforce compliance with the requirements of this order when performing CM functions at all levels.

(3) Support integration of CM into related processes, including the AMS, system engineering, resiliency, logistics, information security, quality assurance, T&E, SMS, personnel safety, security, contracting, disposal, and NAS data release processes.

(4) Participate in the NCP process to provide oversight of change proposals to NAS products, facilities, and services.

c. Next Generation Air Transportation System, ANG-001

(1) Maintain the EA.

(2) Maintain EA products identified for configuration control.

(3) Perform test, evaluation, and analysis of products and services to ensure current NAS and future next-generation air transportation systems are verified and validated per quality standards.

(4) Provide oversight and approval of NAS system requirements.

4. Configuration Change Management Roles.

To effectively implement and perform lifecycle Configuration Management, participants of the CM process may fill one or many of the following Configuration Change Management roles in the performance of Configuration Change Management:

a. CCBs. A cross-functional team that serves as the adjudicatory body for CM in the FAA. This cross-functional team is baseline owners who implement and enforce configuration control throughout the lifecycle of the CI via the NCP process. CCBs must enforce compliance with this order and provide quality assurance for CM processes and baselines. CCBs must establish and maintain their CCB profile in the official CM information system in accordance with chapter 8. CCBs must adjudicate NCPs within their delegated authority, per appendix A of their CCB charter and in accordance with chapter 5. All CCBs must validate their charters annually, conduct annual audits, and status accounting.

(1) CCB Membership. CCBs may elect alternate members to facilitate the continuation of CCB operations in the event that a chartered member is not available.

(a) Co-Chairs — A Co-Chair is an FAA executive at the director level or an FAA employee, delegated with authority to adjudicate an NCP and approve associated CCD actions. A Co-Chair or designee must ensure they are available for adjudication. Delegation of authority for Co-Chairs must be submitted to the NAS CCB.

(b) Permanent Members — An FAA employee who is a voting member with delegated authority representing their organization. Permanent members provide their organization's perspective and recommendations to the co-chairs for NCPs scheduled for adjudication. Permanent members are responsible for ensuring their organization is represented at each CCB meeting. Delegation of authority for permanent members must be submitted to their CCB co-chair.

(c) Ad Hoc Members — Technical advisors, consultants, and program specialists are non-voting members who serve at the discretion of the CCB co-chairs or permanent members.

(d) Executive Secretariat — Administers all CCB operations and supports CM activities.

(e) CCB CM Coordinator — Supports administration of CCB operations and coordinates CM activities.

(2) NAS CCB. The NAS CCB has the overall responsibility to ensure the CM of the NAS Architecture and that the NAS Functional Baseline is maintained in the MCI. When a

change to a NAS product impacts the NAS Functional Baseline, the NAS CCB must coordinate the change with the JRC. The NAS CCB delegates the adjudication authority for NAS products and associated PCI to the domain, Power Systems, Facilities, and Infrastructure (PSF&I), or Service Area CCBs.

(3) Domain CCBs. NAS domain (i.e., operational domains) CCBs have authority for product CIs delegated to them by the NAS CCB and identified in their respective CCB Charter's appendix A. Domain CCBs have authority for PCI associated with CIs.

(4) PSF&I CCB. The PSF&I CCB has authority for CIs delegated to them by the NAS CCB, designated facility types (FAC_TYPES), power, infrastructure, environmental, and facility CIs identified in their respective CCB Charter's appendix A.

(5) Service Area CCBs (SACCBs). The SACCBs have authority for facility baselines that fall within their designated area of responsibility; CIs delegated to them by the NAS CCB and identified in their respective CCB Charter's appendix A.

b. Acquirer and Baseline Manager. The Acquirer and Baseline Manager roles may be filled by the same individual or organization. When the roles are not filled by the same individual or organization, there must be coordination between the organizations in planning CM activities for a product. The Baseline Manager must provide input on how CM functions will be performed throughout the product's lifecycle. Acquirers and Baseline Managers are responsible for performing all CM functions while the product is under their purview. Acquirers and Baseline Managers must ensure accurate baseline information is available to decision-makers, CM practitioners, Offices of Primary Interest (OPI), and Offices of Primary Responsibility (OPR).

Note: If a product is developed by the FAA, then the organization responsible for development is the Acquirer, Supplier, and Baseline Manager.

The following roles are required to facilitate the NCP Process:

(1) Acquirer. An Acquirer is a type of Baseline Manager who is engaged in an Acquirer/Supplier relationship. Acquirers must:

(a) Coordinate with FAA Line of Business (LOB) for input to AMS artifacts before submission to the JRC;

(b) Provide FAA specifications and standards to the Supplier for Product Configuration Information (PCI) development; reference appendix A;

(c) Perform CM planning and management activities in accordance with chapter 3. The Acquirer must ensure the CM Plans for Products are accessible to the Baseline Manager and Operations & Maintenance (O&M) organizations (e.g., Logistics, Second Level Engineering, data consumers, and interfacing products);

(d) Perform Configuration Identification in accordance with chapter 4 to establish and maintain traceability of baselines from acquisition to implementation of the solution;

(e) Establish and maintain baselines and ensure the current configurations are reflected in the MCI in accordance with chapter 5;

(f) Maintain configuration control of baselines. Perform impact analysis of all proposed changes per chapter 5. Impact analysis must include conducting SRM in accordance with the latest edition of the ATO SMS Manual;

(g) Perform CSA and CVA activities in accordance with chapters 6 and 7;

(h) Store and maintain program acquisition/contractual artifacts and baseline documentation within a secure PSL; and

(i) Transfer baseline management responsibilities to the designated Baseline Manager during and/or at the conclusion of the Acquirer/Supplier relationship.

(2) Baseline Manager. The Baseline Manager is the OPR for the product and must perform CM functions in accordance with this policy. The OPR is responsible for releasing products and configuration changes to the field environment. Baseline Managers must:

(a) Perform CM planning and management activities in accordance with chapter 3. The Baseline Manager must ensure the CM Plans for products under their purview are accessible to the O&M organizations. Organizations that manage baselines must establish and maintain a PSL.

(b) Perform Configuration Identification in accordance with chapter 4 for any proposed changes to products and maintain traceability of baselines during the in-service management phase of the AMS lifecycle until the product is decommissioned.

(c) Maintain configuration control of baselines, including the Product Hierarchy (PH), Product Baseline Index (PBLI), and Bill of Materials (BOMs). Perform impact analysis of all proposed changes per chapter 5. Impact analysis must include conducting SRM in accordance with the latest edition of the ATO SMS Manual.

(d) Maintain and re-establish baselines at the conclusion of any modification, Technical Refresh, or Service Life Extension Program (SLEP) and ensure it is accurately captured in the MCI in accordance with chapter 5.

(e) Perform CSA and CVA activities in accordance with chapters 6 and 7.

(f) Verify and validate the currency and completeness of configuration information in the MCI.

c. Facility Baseline Manager. Maintain the facility baseline data throughout the facility lifecycle and allow only NAS products with an approved CCD into the facility operational environment.

(1) Perform configuration control in accordance with Chapter 5 for all controlled facility data including:

(a) Standard facility drawings (footprint), such as equipment layout drawings consisting of:

- Air Traffic operational areas;
- Equipment areas;
- Administrative, support, and storage areas;
- Facility roof plans — equipment and antenna placement on the roof; and
- Facility plot — land use layout including buildings, parking, driveways, antennas, and satellite dishes.

(b) Engineering data, such as critical power panel drawings or one-line electrical diagrams.

(2) Perform status accounting in accordance with chapter 6.

d. Service Area Manager. Support the execution of facility configuration audits of NAS facilities as prescribed in FAA-STD-058, Standard Practice, Facility Configuration Management, and FAA-STD-059, Standard Practice, NAS Terminal Facility Master Plan Guidelines for Existing Terminal Facilities.

e. Originator. An Originator is an FAA employee or contractor who submits a Case File to establish a baseline or to propose a change to an established baseline for a product or facility in the NAS, including the associated configuration information. Originators must comply with the NCP process in accordance with chapter 5.

f. Supervisor. An Originator's FAA supervisor must review and approve or reject the submitted Case File.

g. Organizational CM Coordinator. A point of contact within an organization who will maintain the organization's CM profile and coordinate the organization's participation in the NCP process within the official CM information system.

h. NCP Evaluator. An NCP Evaluator is an SME or stakeholder evaluating a proposed change to a product or facility within their scope of expertise or the discipline of their Service Unit or Staff office. NCP Evaluators must perform evaluations within the scope of the proposed change in accordance with chapter 5.

Note: If an organization requires Supervisor review and approval of the NCP Evaluator's comments and disposition, then the NCP Evaluator's supervisor must review, approve or reject the comment to reflect the organization's position. An NCP Evaluator's supervisor must support the resolution of the comment.

Chapter 3. CM Planning and Management

The CM Planning and Management function establishes the framework and direction to identify and maintain enterprise requirements, product configuration, and baselines throughout the product's lifecycle. CM Planning and Management activities must be performed and are essential in achieving effective, repeatable CM processes over the lifecycle of a product and product CIs. This function begins before establishing a baseline and the Acquirer/Supplier relationship.

CM planning and management supports:

- Establishment and maintenance of appropriate configuration baselines;
- Service analysis for product acceptance and integration into the operational environment;
- Delineation of Acquirer/Supplier CM responsibilities and identification and delegation of roles and responsibilities for organizations participating and contributing to CM processes;
- Quality management initiatives;
- Establishment of performance metrics to evaluate the effectiveness of CM; and
- Training requirements.

1. Configuration Management Plan (CMP). A CMP sets the foundation for the performance of CM functions for NAS products and product CIs. The CMP development must be initiated between the Initial Investment Decision (IID) and the Final Investment Decision (FID).

a. Any organization or program that acquires or manages baselines of products and facilities intended for use in the NAS or contributes to the performance of CM must establish a CMP to comply with AMS policy. If CM is applied consistently across a group of products or product CIs, then a single CMP may be prepared for the group of products/CIs. CMPs must be maintained throughout the product/CIs or facility lifecycle.

(1) Acquirers must use Contract Data Requirements Lists (CDRL) and Data Item Descriptions (DIDs) to levy CM requirements on the Supplier to ensure compliance with FAA CM requirements. Reference the FAA Acquisition System Toolset (FAST) for the standard set of CDRLs and DIDs to tailor contract CM requirements.

(2) Acquirers must collaborate with the Baseline Manager and O&M organizations when planning in-service management transition activities.

(3) If the product acquired is, or includes Services, then the CMP must document how the Acquirer and Baseline Manager will manage, coordinate, and communicate CM activities with the Service Provider through appropriate agreements or contractual requirements.

(4) If the product acquired is, or includes Commercial-Off-The-Shelf (COTS), then the CMP must document how the Acquirer and Baseline Manager will manage and coordinate with the COTS Supplier through appropriate agreements or contractual requirements for version changes of COTS equipment, software, and documents.

(5) If the product acquired is, or includes Software, then the CMP must document software identification and versioning scheme. The scheme must be clearly and concisely documented in the CMP and referenced in the Software Development Plan (SDP), and adhered to at all times. In addition, the CMP must identify:

- (a) Hardware environment on which software is built;
- (b) Software build environment;
- (c) Software product;
- (d) Hardware and software runtime environments;
- (e) Build tools and processes; and
- (f) Build procedures.

b. Organizations that levy requirements for NAS products and product CIs must establish a CM profile within the official CM information system; reference chapter 8.

c. CMPs must be submitted via an Administrative scope Case File.

d. CMPs must be associated with the applicable product profile within the official CM information system, reference chapter 8.

2. Program Support Libraries (PSL). Any organization that acquires or manages baselines of products or product CIs must ensure the product's CMP, CM data, and information is stored, maintained, and secured within a PSL in accordance with the latest edition of FAA Order 1375.1, Information/Data Management. For more information, reference chapter 8.

3. Software Development Libraries (SDL). Planning for the establishment of an SDL is an important part of the overall CM planning for all software CIs. An SDL provides an organized and controlled location for software products and associated data, which may be imaged by either electronic or physical media. An SDL must be secured in accordance with the latest edition of FAA Order 1375.1. For more information, reference chapter 8.

Chapter 4. Configuration Identification

The Configuration Identification function addresses the composition of configuration information for items associated with a product and are uniquely identified, labeled, tracked, and allocated to the designated change authority.

Configuration Identification must be performed throughout the product lifecycle and includes:

- Identifying and selecting CIs from which changes will be managed;
- Assignment of unique identifiers;
- Organization of CIs into an overall PH documenting relationships existing between products, components, software, services, and configuration information;
- Identifying the types of configuration information required for assemblies, parts, components, software, services; and
- Establishing configuration baselines for the product in the MCI in accordance with chapter 5.

Configuration Identification supports the maintenance and management of products, interfaces, baselines, verification, and release of product information resulting in traceable and organized product information for CM governance and control. Acquirers and Baseline Managers must ensure each product lifecycle phase has a controlled set of configuration information that is used as the basis for the other CM functions or for developing new products, modifying existing products, or providing support for products.

1. Configuration Item. A CI is the product, allocated components of a product, or both, that satisfies an end use function, has distinct requirements, functionality, and/or product relationships, and is designated for configuration control. This designation occurs when the NAS Functional Baseline is updated, and a Functional Baseline is established. The product and allocated components may be a service, hardware, software, or a combination of both that satisfies an end-use function as described in the product/solution requirement. The NCP process is used to manage configuration control of baselines for CIs.

The Acquirer, in consultation with the Baseline Manager, must select CIs at the appropriate levels to ensure configuration control of the product and its configuration information. CI selection is based on product information that is often submitted by a Supplier to satisfy a contractual requirement levied by the Acquirer. All CIs must be captured in the MCI.

2. Product Configuration Information. PCI consists of Product Definition Information (PDI) and Product Operational Information (POI). PCI must be developed according to FAA standards and specifications.

a. PDI. PDI is a class of artifacts that describe the functional and physical attributes (form, fit, or function), performance, interoperability, interface, drawings, models, software design documents, or other items used to define the CI. Once approved, the PDI serves as the official record and is used to develop the POI.

b. POI. POI, such as Technical Issuance (TI) manuals and Maintenance Technical Handbooks (MTHB), are a class of documents developed from the PDI. The POI consists of procedures and technical information needed to operate and maintain the product.

3. PH. PH is a graphical or indented representation of the product breakdown that illustrates component relationships. The PH must be reviewed during impact analysis, in accordance with chapter 5, to identify the impacts of proposed changes. The PH is configuration-controlled. The initial version of the PH is typically provided by the Supplier with or as a part of the PBLI.

a. The PH must provide visualization of a product in relation to its higher- and lower-level components.

b. The PH is typically portrayed in a top-down manner, which must encompass the structure of the product down to the Line Replaceable Unit (LRU) (i.e., removed and replaced in its entirety).

Note: Within the context of this policy, LRU is the line replaceable unit. However, within logistics and in accordance with provisioning analysis, the lowest repairable unit is used.

c. The PH must be validated and updated for each change proposed by the Acquirer/Baseline Manager. The PH must be maintained within the MCI.

4. Product Baseline Index. The PBLI is a listing of all CIs/PCI for configuration control. PBLI documents the configuration (hardware, software, etc.) of the product and its related documentation. The PBLI must identify all CIs/PCI and their associated identifiers. The PBLI must be assessed for impacts, validated, and updated for each change proposal.

5. Serial Numbers. If acquisition requirements specify serial numbers be provided, then serial numbers must be maintained throughout the product lifecycle. If a serial number is a unique identifier for a part, configuration information must reflect any updates to serial numbers.

6. Configuration Identifiers and Assignment. Unique configuration identifiers must be assigned to CIs and PCI.

a. Technical Operations Services, AJW-0000 Assigned Identifiers

(1) EPI — An EPI provides the basis for traceability of NAS products in the EA to the CIs and PCI in the MCI. The EPI is a unique identifier assigned to CIs at the product level. The EPI is assigned upon the submission of the specification (SPEC) but no later than FID. The EPI establishes traceability and a crosswalk between the program and the product; the product and operational activities for the product; the EA and the MCI, and other data and information systems of record.

(2) FAA-Type Designation Number (FA-Type) — The FA-Type number must be assigned to hardware-based assemblies and components developed or modified to meet FAA specifications. The FA-Type number can be assigned at any time. This assignment distinguishes the FAA-modified equipment from COTS equipment. FA-Type numbers are not required for COTS products or non-federal facilities. The Acquirer/Baseline Manager may choose to waive the requirement for the FA-Type Number assignment. The Acquirer/Baseline Manager must document their choice in the CMP.

(3) FAA Standards — Standard identifiers must include “FAA-STD-” followed by a unique number.

(4) SPEC — The specification number must be assigned to the document describing the NAS product. The specification number is assigned upon completion of IID or upon submission of the specification, but no later than FID. Traceability numbers for SPECS are assigned using the following format: FAA-(1)-(unique number), where (1) equals an alpha character associated with the specification type.

Note: Lower-level specifications will not require FAA-issued identifiers and do not have to follow FAA standards.

(5) Interface Requirements Documents (IRD) — The IRD number must be assigned to the document describing the interface requirements for the product. Traceability numbers for IRDs are assigned using the following format: NAS-IR-(unique number), where IR is the first two characters of the document acronym.

(6) Interface Control Documents (ICD) — The ICD number must be assigned to the document describing the interface control for the product. Traceability numbers for ICDs are assigned using the following format: NAS-IC-(unique number), where IC is the first two characters of the document acronym.

(7) Services Requirements Documents (SRD) — The SRD number must be assigned to the document describing the service requirements for the product. Traceability numbers for SRDs are assigned using the following format: NAS-SR-(unique number), where SR is the first two characters of the document acronym.

(8) Web Services Description Documents (WSDD) — The WSDD number must be assigned to the document describing web services for the product. Traceability numbers for WSDDs are assigned using the following format: NAS-WS-(unique number), where WS is the first two characters of the document acronym.

(9) Java Messaging Services Description Documents (JMSDD) — The JMSDD number must be assigned to the document describing java messaging services for the product. Traceability numbers for JMSDDs are assigned using the following format: NAS-JM-(unique number), where JM is the first two characters of the document acronym.

(10) Computer Program Functional Specification (CPFS) — The CPFS number must be assigned to the document describing the software requirements specification for a product. Traceability numbers for CPFS are assigned using the following format: CPFS-(unique number).

b. Management Services, AJG-0000 Assigned Identifiers. These document types are assigned identifiers based on the latest edition of FAA Order 0000.1, FAA Standard Subject Classification System. An MTHB must be assigned a subject classification number, point number, and/or revision level through the DMS via the Directives Management Office; reference the latest edition of FAA Order 1320.58. If the originating organization requires assistance obtaining the classification number, email 9-AWA-AIO-Directives@faa.gov.

- (1) Maintenance Technical Handbooks (MTHB)
- (2) Technical Instruction Books (TIB) or Technical Issuance (TI) Manuals

Note: TIs are publications acquired from non-agency sources or developed within the FAA that directly concern installation, maintenance, or modification of equipment, systems, facilities, or aircraft. TIs are prepared in accordance with the latest edition of FAA-D-2494, Technical Instruction Book Manuscript: Electronic, Electrical, and Mechanical Equipment, Requirement for Preparation of Manuscript and Production of Books. Manufacturer TIBs are included in this category, as well as TIBs, contractor publications, military documents, and other agencies' documents.

c. Acquirer/Baseline Manager Supplied Identifiers

The following identifiers must be included in PCI that provide product structure breakdown and are provided by the Acquirer/Baseline Manager. These identifiers are typically developed and delivered by the supplier as a contract deliverable.

- (1) Part Numbers
- (2) Model Numbers
- (3) Equipment Serial Numbers

Note: Equipment serial numbers are unique to each item that comes off an assembly line. It is a unique identifier of a particular instance of a part design. Acquirers/Baseline Managers must identify the serial number of the component/part when a configuration change is applied to the component/part.

- (4) Software/Firmware associated with an identifier and its attributes (i.e., version, title or description, and release date)

- (5) National Stock Numbers (NSN)

- (6) Requirements/Lower-level specifications, such as Supplier provided specifications, Database Design Description (DBDD), Functional Design Description (FDD), Version Description Document (Software) (VDD), etc.

7. Baseline Management. Acquirers and Baseline Managers must establish and maintain configuration baselines. The configuration baselines represent the technical aspects of the approved program requirements. The baselines are established and controlled within the MCI. Legacy products (products established before the effective date of this order) with incomplete

baseline information must establish an appropriate baseline when the product undergoes a technical refresh, SLEP, or modification.

a. NAS Functional Baseline. The technical portion of the NAS Architecture defines and translates services, capabilities, and implementation steps into design solutions and their required technical characteristics. The technical characteristics are defined as “NAS-Level Requirements”, which explicitly translate the operational needs of the agency into functional, performance, and constraint requirements that are sufficient to direct the appropriate design and development of NAS systems. NAS-level Requirements are the highest-level requirements maintained within the FAA and are initially utilized during Investment Analysis. The NAS Functional Baseline is comprised of two elements:

- (1) NAS-level Requirements
- (2) Final Program Requirements Document (fPRD).

Note: The JRC is the approval authority for NAS-level requirements and fPRDs.

b. Functional Baseline. The Functional Baseline is the approved documentation set describing the product’s functional, performance, interoperability, and interface requirements, as well as the verifications required to demonstrate achievement of those specified requirements. This baseline is required and is used to evaluate the impact of future changes to agency-approved requirements and must be maintained throughout the product’s lifecycle. The Acquirer must establish the Functional Baseline prior to or directly after the Final Investment Decision (FID) or release of Screening Information Request (SIR) — whichever occurs first. It is prudent to have the Functional Baseline established prior to FID to provide a basis for validation and verification of requirements and cost-estimating purposes. For products developed internally to the FAA, the Functional Baseline must be established prior to any development. For new products entering the NAS architecture, including services, the following PDI must be provided to establish the Functional Baseline:

- (1) SPEC
- (2) IRD and/or SRD.

c. Allocated Baseline. The Allocated Baseline represents the Supplier’s solution to the functional requirements and allocates the requirements, specifications, interfaces, or performance requirements to a product and its components. If elected, the Allocated Baseline is established and maintained by the Supplier and approved by the Acquirer. The Acquirer must verify and approve the Allocated Baseline after the Preliminary Design Review (PDR). This baseline ensures traceability is maintained between the Functional Baseline and all changes managed by the Acquirer until the Product Baseline is established. The Acquirer must establish the Allocated Baseline after PDR. The following PDI must be provided when establishing the Allocated Baseline:

- (1) ICD
- (2) CPFS (as applicable).

For products that have Data Interface Documents, the Acquirer must include the following PDI when establishing the Allocated Baseline:

- (3) WSDD
- (4) JMSDD.

Note: If the Allocated Baseline is not elected, PDI is added to the Product Baseline.

d. Product Baseline. The Product Baseline is the configuration of the system or product being delivered to the customer. It consists of the combined performance/design documentation used in Configuration Identification, production acceptance testing (PAT), and test requirements. This documentation package [PDI] incorporates the cumulative baseline documents describing a CI's functional, performance, interoperability, and interface requirements down to the lowest level intended for replacement and the verifications required to confirm the achievement of those specified requirements. The Acquirer must coordinate with the Baseline Manager and O&M organization for configuration changes proposed by the Supplier. The Acquirer must establish the Product Baseline after the Functional Configuration Audit/Physical Configuration Audit (FCA/PCA).

The PDI must incorporate any required updates resulting from FCA/PCA. The following PDI must be provided when establishing the Product Baseline:

- (1) PH
- (2) PBLI
- (3) ICD (if Allocated Baseline is not elected)
- (4) CPFS (if Allocated Baseline is not elected)

For products that have Data Interface Documents, the Acquirer must include the following PDI when establishing the Product Baseline:

- (5) WSDD (if Allocated Baseline is not elected)
- (6) JMSDD (if Allocated Baseline is not elected)

e. Operational Baseline. The Operational Baseline is comprised of the approved product definition information and POI. The Operational Baseline is the approved technical documentation representing the installed operational product. This represents a Product Baseline adapted to local conditions. Operational Baselines comprise the technical documentation that initially describes a delivered product. They also include changes to that delivered product that occur as a result of in-service modifications/improvements or as a result of the addition of FAA-developed documentation/tools. The Operational Baseline includes the Product Baseline and any subsequent changes to it. The Operational Baseline is established prior to or directly after In-Service Decision (ISD) and Joint Acceptance Inspection (JAI) for the selected Key Site(s). The following POI must be provided to establish the Operational Baseline:

- (1) TI
- (2) MTHB

All PCI must be updated to incorporate all changes due to Key Site testing. Once the Operational Baseline is established, all PCI must be updated for modifications to the Operational Baseline. PCI includes any impacted PDI and POI. POI may be updated during general maintenance activities which do not require CCB adjudication and approval.

f. Facility Baseline. A Facility Baseline is comprised of a drawing set used to support capital investment planning, security, resiliency, product installation, and changes to a facility's operational environment. The decision whether to establish or modify a Facility Baseline is determined by assessing the impact of FAA projects, as well as Service Area and locally initiated changes and improvements. Upon JAI of the product, in accordance with the latest edition of FAA Order 6010.7, Joint Acceptance Inspection, the following documents must be provided to establish the Facility Baseline:

- (1) JAI Report;
- (2) Facility Drawings (FDRWs) — including Site Plan, Roof Plan, Floor Plan, Elevations, Electrical, and Critical Power Panel Schedules. All FDRWs must be managed in accordance with the latest edition of FAA Orders 6000.55, National Facility Drawing Library Procedure and 6080.1, Using Facility Power Panel Schedule (FPPS); and
- (3) Siting Criteria Orders and associated Deviations and Waivers, as applicable. Case Files for deviations and waivers to Siting Criteria Orders must be adjudicated by the Domain CCB.

Note: Changes to Siting Criteria Orders must be performed in accordance with the latest edition of FAA Order 1320.1.

8. Software Baseline Management. Software baselines are identified at points in time and formalized by events that are crucial to the lifecycle of the software product. Several version numbering schemes are in use today to track versions of software products and all CIs. These schemes include numeric identifiers, where each major release of the software receives a unique numerical identifier that can be expressed as three numbers, separated by periods, such as 1.2.1.

As an example, some enterprises use a versioning scheme that takes the form of “major.minor.build.revision” or “major.minor.maintenance.build”; e.g., Build 1.2.1.1. The latter scheme is used for a release that contains a minor change to the base release and is further augmented by a maintenance release, such as a patch or security addition. Some enterprises set the first-released version of a software product to version 1.0. For versions preceding the formal release of the software (such as Alpha or Beta versions), the release may use numbers below 1.0 such as 0.1.1.1. Software versions slated for a testing environment or other internal use may also use similar schemes.

After the software is initially baselined, major builds are subject to formal change control via the NCP process prior to releasing the major software version to the field environment. The

environment and processes must be documented in a release or version description document. Software builds must be reproducible and managed throughout the product's lifecycle via the SDL; reference chapter 3.

Similar to hardware, software CIs must be uniquely identified, and baselines must be established from which changes are managed and controlled. The following software CI configuration information must be identified in the PBLI:

- a. Specifications;
- b. Interface documents (IRD/ICD);
- c. Software Design Description (SDD);
- d. Software/System Design Description (SSDD);
- e. Software Development Plan (SDP);
- f. Software Requirements Specification (SRS);
- g. Database Design Description (DBDD);
- h. Version Design Description (VDD); and
- i. Software User Manual (SUM).

Acquirers and Baseline Managers must ensure baseline hardware configurations, including spares, have the current operational software/firmware version installed prior to their integration into the NAS. Software that is delivered as part of the operational system hardware must maintain its versioning schema throughout the lifecycle of the product.

Notes: The following updates do not require formal change control via the NCP process:

- Site Adaptation updates are the system's adjustable parameters and are not a change to the product's Operational Baseline. Each modification OPR must determine and maintain a structured method for issuing site adaptation instructions.
- Virus definitions and patches for security purposes do not change the Operational Baseline. Each modification OPR will determine and maintain a structured method for issuing each system's virus definitions.

Chapter 5. Configuration Change Management

The Configuration Change Management function is a measurable and systematic process to identify, record, evaluate, adjudicate, incorporate, and verify the implementation of the authorized change to CI and their baselines. The NCP process is the official change management process for the ATO. The NCP process is used to manage and control configurations of baselines for CIs.

1. CCB. A CCB is the agency-authorized forum for establishing CM baselines and for reviewing and acting upon changes to CM baselines. CCBs authorize proposed changes to CIs and configuration information. A CCB ensures the functional and operational integrity of a baseline through the establishment and enforcement of standard configuration change management practices and processes.

The CCB provides oversight of the change management process that traces a CI's requirements to the enterprise requirements and all changes that impact established baselines throughout the product or facility lifecycle. This responsibility includes the evaluation of all NCPs impacting items established for configuration control and the authority to conduct verification, audits, and status accounting for all approved changes.

a. CCB Charters — All CCBs must have a charter, which is the official agency artifact documenting the CCB's adjudication authority. CCB charters and any updates to the charter must be submitted to the NAS CCB. The NAS CCB authorizes and approves all domain and service area CCB charters to ensure responsibility for change control is delegated for all CIs, PCI, and facilities in the NAS architecture.

CCB charters must include the following appendices/information:

- (1) Appendix A — identifies the CIs or facilities and the PCI the CCB is authorized to adjudicate.
- (2) Appendix B — identifies and defines the membership of the CCB.
- (3) Appendix C — identifies and defines the standard operating procedures for the CCB.
- (4) Appendix D — identifies and defines CM performance metrics (NAS CCB only).

b. CCB Hierarchy — The CCB hierarchy represents the major functional and operational domains of the NAS Architecture. The NAS CCB is the authoritative board for the NAS. The NAS domain CCBs represent the major functional groupings (i.e., Automation, Communication, Flight Services, Navigation, PSF&I, Surveillance, Weather) that comprise the NAS. The Service Area CCBs represent the geographical areas (i.e., Eastern, Central, Western) of the NAS.

2. CCB Adjudication Authority.

a. NAS CCB — The NAS CCB's adjudication authority extends to proposed changes that impact:

(1) Products without an established Operational Baseline that have not been delegated to a CCB;

Note: Delegation of a product to a domain or service area CCB may occur at any point once a Functional Baseline has been established.

(2) Prototypes;

(3) Multiple CCBs;

(4) SRDs and IRDs, including IRDs for any Mission Support products interfacing with a NAS product or with the NAS;

(5) Special Case ICDs and ICDs without an approved parent IRD, including Mission Support products interfacing with a NAS product or with the NAS;

(6) FAA Standards;

(7) FAA/General specifications; and

(8) CCB Charters.

The NAS CCB manages changes to the NAS Functional Baseline, which is approved by the JRC and consists of NAS-level requirements and the fPRD. The NAS CCB must notify the investment decision authority if changes to the fPRD affect cost, schedule, or performance.

b. Domain CCBs — Domain CCB's authority extends to CIs that have been delegated by the NAS CCB and proposed changes that affect associated PCI, including:

(1) SPECs;

Note: If the update to the SPEC is creating a new CI, then the SPEC must be adjudicated at the NAS CCB.

(2) MTHB;

(3) TIs;

(4) PBLI;

(5) ICD (with a parent IRD);

(6) WSDD (with a parent SRD);

(7) JMSDD (with a parent SRD); and

(8) Siting Criteria Order/Siting Criteria Deviations and Waivers.

Note: Siting Criteria deviations and waivers are approved by the OPR of the criteria. Domain CCBs maintain oversight of the configuration change management process, inclusive of all approved deviations and waivers.

c. PSF&I CCB — PSF&I CCB’s authority extends to power, infrastructure, and environmental CIs and facilities that have been delegated by the NAS CCB and proposed changes that impact associated PCI, including:

- (1) As-Built Equipment Drawings;
- (2) Critical Power Panel Drawings;
- (3) SPECs;
- (4) MTHB;
- (5) TIs;
- (6) PBLI;
- (7) ICD (with a parent IRD);
- (8) WSDD (with a parent SRD);
- (9) JMSDD (with a parent SRD); and
- (10) Siting Criteria Order/Siting Criteria Deviations and Waivers.

d. SACCBs — SACCB authority extends to facilities within the service area’s authority, regional/local CI that have been delegated by the NAS CCB, and proposed changes that impact associated PCI, including:

- (1) As-Built Equipment Layout Drawings (Space Management);
- (2) Critical Power Panel Schedules; and
- (3) Critical Power Breaker Assignment for Terminal Facilities.

3. Impact Analysis. The Acquirer/Baseline Manager must coordinate the collection of required information and solicit the necessary inputs to complete the planning and analysis of the proposed change. Impact analysis begins prior to initiating the NCP process. A Supplier-generated change proposal may be used to support impact analysis. While a Supplier/Acquirer relationship exists, the Acquirer/Baseline Manager must evaluate all engineering change proposals (ECPs) or service change proposals (SCPs) to determine impacts on a baseline. ECPs or SCPs that affect a baseline must be processed with an NCP.

Impact analysis of a proposed change must include all stakeholders with an interest, action, or have approval authority for required artifacts and resource allocation. Stakeholders support the

Acquirer/Baseline Manager and provide guidance, recommendations, artifact development, and identification of proposed actions necessary for testing and implementation.

Impact analysis must be comprehensive to support the evaluation and adjudication of the proposed change. Impact analysis results must include a description of the issue or need and a proposed solution. Impact analysis must also address:

- a. Funding Sources;
- b. Security assessment in accordance with the latest edition of FAA Order 1370.121, FAA Information Security and Privacy Program & Policy;
- c. Operational risks assessment in accordance with the latest edition of FAA Order 6000.15, General Maintenance Handbook for National Airspace System (NAS) Facilities;
- d. The impact on Reliability, Maintainability, and Availability (RMA);
- e. The impact to test equipment assets and accessories in accordance with the latest edition of FAA Order 6200.4, National Test Equipment Program Management; and
- f. Safety risks and mitigating plans, developed in accordance with the latest edition of FAA Order 1000.37 and procedures identified in the latest edition of the ATO SMS Manual. Every NAS change proposed via the NCP process must be evaluated to determine whether an SRM panel is required.

Note: The OPR should allow sufficient time for the production, review, and approval of the associated SRM document prior to CCB adjudication. Timeframes for the preparation of SRM documents may vary from several days, weeks, or months depending on the complexity of the change and the potential hazards involved.

4. SRM Applicability to the NCP Process. If an SRM panel is required, then the Originator must produce an SRM document with hazards or without hazards. A record of this determination, and any resulting documentation, must be included in the material provided to the CCB in accordance with the ATO SMS Manual. In terms of SRM, any given NCP can be categorized as one of the following:

a. Requiring an SRM panel — Requires the convening of an SRM panel, the proceedings of which must be documented in an SRM document with or without hazards. Please note that from an NCP process perspective, this translates to requiring a signed ATO SMS-compliant SRM document attached to the NCP prior to CCD approval.

b. Not requiring an SRM panel or an associated SRM document — The latest edition of the ATO SMS Manual includes a provision that allows some NCPs to not require an SRM panel or an associated SRM document when the NCP does not have the potential to affect the safe provisioning of air traffic management (ATM) and/or communication, navigation, and surveillance services (e.g., facility layout/redline/end-state drawings, editorial and administrative changes that do not affect the substantive elements of a procedure or system). Refer to the latest edition of the ATO SMS Manual regarding these SRM exceptions. From an NCP process

perspective; this translates to requiring the following SRM exception clause to be included in the Risk field of the Case File: "Documented Safety assessment not required in accordance with the latest edition of the ATO SMS Manual."

Note: Coordination with a designated Safety representative (e.g., ANG Safety Engineer, AJI Safety Case Lead, and Program Safety Lead) should begin prior to Case File origination. Having the SRM document available in sufficient time for review is a critical factor for minimizing delays during the NCP process. Therefore, it is recommended that a minimum of thirty (30) days be allowed for the safety review/coordination (30 days prior to NCP evaluation).

c. SRM Documentation and Guidelines

(1) All NCPs presented to the CCB for adjudication must include a signed ATO SMS-compliant SRM document or the SRM exception clause.

(2) All signed ATO SMS-compliant SRM documents must reference the NCP number to aid in traceability to the NCP process.

(3) The NCP process is not intended to be a Quality Assurance process for the SMS. Any safety concerns relating to SRM documentation should be expressed through a Safety representative (e.g., ANG Safety Engineer, AJI Safety Case Lead, and Program Safety Lead)

d. Safety NCP Evaluators

(1) Review the safety analysis to validate that it supports and is consistent with the scope of the proposed change or scope of the amendment.

(2) Ensure that safety evaluations are completed prior to CCB adjudication by non-concurring or concurring with comment on the NCP until the safety requirements are met.

(3) Validate that the use of the SRM exception clause, if referenced within the Risk field of the NCP, is in accordance with the latest edition of the ATO SMS Manual.

(4) Provide recommendations and assist Originators in resolving safety-related comments.

(5) Ensure that safety-related action items are incorporated into the CCD actions as necessary.

5. NCP Process.

The NCP process must be used to establish a baseline or propose a change to an established baseline. The NCP process has three phases; each phase is intended to ensure the proposal is mature and satisfies requirements. The NCP process phases are:

a. Case File Origination and Prescreening;

- b. NCP Evaluation and Adjudication; and
- c. CCD Implementation and CCD Action Closure.

6. Case File Origination and Prescreening.

a. Origination — Proposed changes must be submitted by completing the Case File. A Case File must identify the impacted CIs and the following information:

- (1) The originating office
- (2) A short title that briefly describes the proposed change
- (3) The results of impact analysis, including:
 - (a) The problem or issue;
 - (b) The proposed change;
 - (c) The benefits of the proposed change;
 - (d) The interface impacts;
 - (e) The funding source;
 - (f) The impacts to logistics;
 - (g) The impacts to training;
 - (h) The impacts to test equipment;
 - (i) The schedule for implementation;
 - (j) The key stakeholders;
 - (k) The actions required to fully implement the change;
 - (l) The Location Identifier(s) (LOCID), Facility Identification Code (FIC) where the change will be implemented, and FAC_TYPE designation of the product CI, per the Facility Service and Equipment Profile (FSEP);
 - (m) The safety risks of the proposed change, per paragraph 4, SRM Applicability to the NCP Process; and
 - (n) Security impacts.

b. Case File Scopes — An Originator must identify the scope of the Case File. This order defines four scopes to facilitate the categorization and traceability of changes introduced in the NAS.

(1) National — Establish or modify the Functional, Allocated, Product, and Operational Baselines for NAS products, regardless of the location(s) where the change is implemented.

(2) Local — Propose changes to a NAS facility or multiple facilities within a Technical Operations district. The adjudication authority of a local scope is based on the impacted facility and PCI, as identified in appendix A of a Service Area CCB charter.

(3) Test — Evaluate and verify a new configuration or change to a baseline configuration. A justification must be provided when test activities are required in an operational environment (e.g., not in a laboratory environment). A test plan must be attached to the Case File. The duration of test scope NCPs are limited to 1 year from approved CCD. The NCP must be amended to add or remove locations and to request an extension for the duration of the test. Upon completion of testing activities, the test results must be submitted to complete CCD action closure.

(4) Administrative — This scope must be used to correct typographical errors or add missing information that only affects the configuration documentation. Administrative scope cannot affect or have the potential to affect end item use, form, fit or function, interface, or any other performance requirements or characteristics. This scope must be used to request CI assignment/reassignment to OPRs and CCBs. Administrative scope Case Files do not require CCB adjudication; review is limited to the OPR, OPI and key stakeholders. The Executive Secretariat/CCB CM Coordinator must verify the Case File satisfies the criteria for administrative scope.

c. Reason for Change — Reasons for change are categorized by Case File scope. An Originator must identify the reason for change.

(1) National Scope

(a) NAS — This reason for change must be used to add new CIs to the MCI, update the NAS Functional Baseline, and modify FAA Standards and FAA/general specifications. This reason for change requires NCP evaluation and NAS CCB adjudication.

(b) Functional — This reason for change must be used to establish or update the Functional Baseline if an Operational Baseline has not been established. This reason for change requires NCP evaluation and CCB adjudication.

(c) Allocated — This reason for change must be used to establish or update the Allocated Baseline if an Operational Baseline has not been established. This reason for change requires NCP evaluation and CCB adjudication.

(d) Product — This reason for change must be used to establish or update the Product Baseline if an Operational Baseline has not been established. The FCA/PCA audit report must be attached to the NCP. This reason for change requires NCP evaluation and CCB adjudication.

(e) Operational — This reason for change must be used to establish the Operational Baseline. If draft versions of PCI were provided to establish any baseline, then the final version

of the PCI must be provided when establishing the Operational Baseline. This reason for change requires NCP evaluation and CCB adjudication.

(f) Modification — This reason for change must be used to modify and update an established Operational Baseline for a product. This reason for change requires NCP evaluation and CCB adjudication. The Case File must reference any test scope NCPs that were approved to evaluate the proposed change.

Note: The latest edition of FAA Order 6032.1, National Airspace System (NAS) Modification Program, prescribes the mechanism authorizing the implementation of the approved change and allows OPRs to perform general maintenance activities to correct out-of-specification conditions that do not change the product's established baselines. Modifications to a product's Operational Baseline that impacts FDRWs will result in CCD actions for the facility to update their FDRWs.

Note: Coordination of review for MTHBs is external to the NCP process; reference the latest edition of FAA Order 1320.58. Proposed changes to products that affect an MTHB will result in CCD action for the OPR to update the MTHB.

(g) Decommission — This reason for change must be used to decommission a product from the NAS after all instances of a product, including test suites, have been disposed of at all locations. This reason for change requires NCP evaluation and NAS CCB adjudication.

Note: When there are legal requirements to maintain an instance of the product within a laboratory or testing environment, the product cannot be decommissioned.

(2) Local Scope

(a) Installation — This reason for change must be used to install a product with an approved Operational Baseline at a building facility during the in-service management phase of AMS. This reason for change requires NCP evaluation and CCB adjudication.

Note: The NCP can be closed upon completion of JAI if applicable, per the latest edition of FAA Order 6010.7, the submittal of the updated FDRWs in the Computer-Aided Engineering Graphics (CAEG), Enterprise Document Management System (EDMS); critical/essential power bus assignments are included in the FPPS per FAA Order 6080.1, and all CCD actions have been closed.

(b) Deactivation — This reason for change must be used to disconnect a product from the NAS without physical removal of the product from the building facility. The Baseline Manager must assess the impact on interfaces and associated documentation. References for developing CCD actions that are required to deactivate the product include the Reutilization and Disposition Plan (RDP) and the CMP. This reason for change requires NCP evaluation and CCB adjudication.

(c) Disposal — This reason for change must be used to remove an instance of a product from a building facility. This reason for change requires NCP evaluation and CCB adjudication. If deactivation and disposal activities occur simultaneously, the Originator must select Disposal as the reason for change.

(d) Emergency — This reason for change must be used to make a temporary change to a product with an established Operational Baseline at a facility to address a safety, security, or emergency condition. The Originator must identify the impacted site using the LOCID, FIC, and FAC_TYPES designation of the product CI, per the FSEP.

(i) The organization authorized to perform an emergency modification must submit a local scope Case File with Emergency as a reason for change, within 2 calendar days from the completion of the modification. The Baseline Manager/OPR must receive notification of the emergency when the issue impacts a product.

(ii) A Safety Emergency Notice (SEN) prescribed in the latest edition of FAA Order JO 1320.58, must be attached to the emergency Case File. Emergency reason for change, requires limited evaluation and adjudication, and is used to document the configuration change required to resolve the emergency.

(iii) Upon resolution of the emergency, the NCP must be amended to include verification that the impacted baseline has been returned to pre-emergency conditions. Duration of an emergency NCP is limited to 1 year from approved CCD. Emergency NCPs must be amended to request an extension to the duration. Extensions must be approved by the CCB with adjudicatory authority of the impacted facility.

(iv) If the emergency situation requires a permanent solution, then the product's Baseline Manager or designee must submit a national scope Case File with reason for change as modification. The modification NCP must reference the Emergency NCP.

(3) Test Scope

(a) Key Site Test — This reason for change must be used to perform Key Site testing of the product. Key Site testing occurs prior to or in parallel with Operational Test and Evaluation in the acquisition lifecycle and supports ISD. Key Site test activities are adjudicated by the CCB with adjudicatory authority for the CI as defined in appendix A of the CCB's Charter. Key Site testing activities must not start until CCB approval has been granted. This reason for change requires NCP evaluation and CCB adjudication.

(b) Prototype Test — This reason for change must be used when evaluating and testing a product or emerging technology that is not in the NAS and does not have an established functional and Product Baseline. Prototype can also be used when a program is evaluating and collecting data on a potential solution to define requirements. A prototype must have an FAA sponsor. The Originator must identify the facility where the test will be conducted. This reason for change requires NCP evaluation and NAS CCB adjudication. The NAS CCB may delegate adjudication authority to a domain CCB. The delegation must be documented in the NCP.

(c) **Modification Test** — This reason for change must be used to test a configuration that impacts the Operational Baseline, which includes the hardware, software, firmware, or functional operation of a NAS CI to assess the proposed operational configuration. The Originator must identify the facility where the test will be conducted. This reason for change requires NCP evaluation and adjudication by the authorizing CCB.

Note: If an NCP is in process, the OPR may issue the draft System Support Directive (SSD) with a Letter of Authorization (LOA) to initiate modification testing activities at the facility.

(4) **Administrative Scope**

(a) **Editorial** — This reason for change must be used to correct editorial issues in PCI (e.g., typographical errors, formatting, missing approved content, changes to OPR for the PCI, and updates to order references).

Note: PCI that follow an external process to review, evaluate, and approve changes at the organizational group level will not require an administrative scope NCP to update PCI attributes in the MCI; for example: Maintenance Technical Handbook update process via the NAS Technical Library, reference chapter 8.

(b) **Organizational** — This reason for change must be used for CI assignment/reassignment to an OPR and CCB.

(i) Changes to OPR for a CI/PCI must be initiated by the OPR; the applicable CCB must be notified of the change.

(ii) For CI assignment to a CCB, the CCB receiving assignment and the NAS CCB must be notified of the proposed change.

(c) **Program** — This reason for change must be used to submit program-level documentation for inclusion in the MCI if elected in the CMP. Program documents do not require NCPs to authorize changes.

d. Case File Priority — The Case File priority establishes a mechanism to prioritize the evaluation and adjudication of NCPs. The Executive Secretariat must validate the justification supports the selected priority level. Case File priorities are as follows:

(1) **Normal** — No urgency or emergency exists; the evaluation phase of the NCP must be completed within 30 calendar days. Justification is not required for normal priority Case Files.

(2) **Time-Critical** — Evaluation must be completed within 15 calendar days. Time-critical priority is assigned when proposed change addresses an issue that compromises mission effectiveness, identifies a potential hazard, may have a significant impact on contractual requirements, or affects an interface impacting other program schedules. Justification must be included in the Case File.

Note: The Time Critical modification type under FAA Order 6032.1 satisfies the requirement for time-critical evaluation.

(3) Urgent — Evaluation must be completed within 5 calendar days. Urgent priority is assigned when an issue affects national security, generates or perpetuates hazardous conditions that could result in serious or fatal injury to personnel, or result in extensive damage or destruction of equipment or environment. Justification must be included in the Case File. The following modification types under FAA Order 6032.1 satisfy the requirement for urgent evaluation:

- (a) Safety Modification; and
- (b) Critical for NAS Operations Modification.

e. Supervisor Case File Review and Approval — The Originator's supervisor must review and approve or reject the submitted Case Files to ensure the Case Files meet the organization's goals and objectives for the product. A supervisor's approval is required prior to initiating prescreening or NCP evaluation.

Note: If a supervisor originates a Case File, then the supervisor's manager must review and approve or reject the Case File.

f. Prescreening — Prescreening is a review that is performed to assess the viability and completeness of the proposed change; to ensure the proposed change is in accordance with FAA orders, specifications and standards. If the Originator is not the Acquirer/Baseline Manager, the Acquirer/Baseline Manager must be included in prescreening.

7. NCP Evaluation and Adjudication. For all scopes except administrative, once the origination and prescreening phase has been completed, the proposal moves to the NCP evaluation and adjudication phase.

a. NCP Evaluation — The Originator and/or Baseline Manager must plan for sufficient time to complete NCP evaluation within the schedule of the proposed change to allow for the collection of comments from all NCP Evaluators assigned to review. The NCP Evaluator must provide a response within the prescribed review timeframe of the NCP.

The Executive Secretariat or CCB CM Coordinator prescribes the timeframe for evaluation based on the schedule of the proposed change provided by the Originator. The Executive Secretariat or CCB CM Coordinator must monitor and provide oversight of the evaluation to ensure the review is conducted within the prescribed timeframe.

(1) Dispositions — Assigned NCP Evaluators must respond to requests for evaluation with one of the following dispositions:

(a) Concur Without Comment (CWOC) — The NCP Evaluator agrees the change proposal satisfies the requirement(s) of the NCP Evaluators' organization.

(b) **Concur With Comment (CWC)** — The NCP Evaluator agrees the change proposal satisfies the requirement(s) of the NCP Evaluators' organization and offers additional comments for consideration.

(c) **Non-Concur With Comment (NCWC)** — The NCP Evaluator must provide an NCWC when the NCP:

- (i) Does not satisfy the requirement(s) of the evaluator's organization (e.g., policy compliance, documentation, performance, and supportability);
- (ii) Does not coincide with the description of the change;
- (iii) CIs are incorrectly identified;
- (iv) The NCP Evaluator identifies impacts not documented in the NCP or is outside of the scope of the NCP; and
- (v) The CCB coordinating the evaluation is incorrect.

The NCP Evaluator must include a rationale for non-concurrence and guidance for resolving the non-concurrence. When an NCP Evaluator's comment is determined to be outside the scope of authority of the evaluating organization or outside of the scope of the proposed change, the comment must be forwarded to the Executive Secretariat or delegated CCB CM Coordinator for assessment and reassignment to the appropriate organization that has the authority to assess and disposition the comment.

(2) **No Response** — If an assigned NCP Evaluator or organization does not respond to the request for evaluation within the prescribed timeframe, then the Executive Secretariat or CCB CM Coordinator must seek comment from the NCP Evaluator or organization. The Executive Secretariat or CCB CM Coordinator must work with the Originator to assess the criticality of the missing review. The results of their assessment must be documented within the NCP prior to scheduling the NCP for adjudication.

b. Comment Resolution — The Originator or Baseline Manager must seek to resolve all comments before CCB adjudication. If resolution cannot be achieved during NCP evaluation, then the Executive Secretariat or CCB CM Coordinator must submit the NCP for CCB assistance with resolving non-concurrence. The authorizing CCB must support the resolution of non-concurrence or accept the non-concurrence and document the decision with the CCB minutes.

c. CCB Adjudication — An NCP may be adjudicated when all evaluations are completed, and comments are satisfactorily resolved. An NCP may be adjudicated out-of-board at the CCB Co-Chair's discretion. The Executive Secretariat and/or CCB CM Coordinator must ensure only NCPs that include signed SMS-compliant SRM document or the SRM exception clause is included in the Risk field before the NCP is recommended to the CCB Chairperson(s) for adjudication.

d. CCD — CCB adjudication of an NCP results in a CCD. The CCB must render one of the following decisions:

(1) **Approved** — Grants authorization to proceed with the CCD actions to test or implement the proposed change.

(2) **Disapproved** — May indicate unsatisfactory benefit from the proposed change or unsatisfactory results of testing. The Executive Secretariat must document the rationale for all disapproval decisions. A new Case File must be submitted if the Originator elects to resubmit the proposed change for consideration.

(3) **Deferred** — CCB Co-Chairs may defer a CCD when additional consultation is needed or a revision to the NCP package is required to render a decision. The Executive Secretariat must document the rationale for deferral. A deferred NCP must be scheduled for adjudication no later than 90 calendar days from the deferral decision. The Executive Secretariat must document a disposition rationale for deferrals exceeding 90 calendar days.

The Executive Secretariat must document the CCD rendered by the CCB Co-Chairs within the NAS Change Proposal within five (5) working days of the CCB meeting. A CCD may be appealed.

e. CCD Actions — A CCD action identifies a change order task or activity that is required to test or implement a proposed change. Each proposed CCD action:

- (1) Must be discreet;
- (2) Must identify action owners (individual or organization); and
- (3) Must identify a planned completion date.

All proposed actions must be included as part of the NCP package before the evaluation and adjudication phase of the NCP. The delegated CCB may assign additional actions during the adjudication of the NCP. The adjudication of the NCP and issuance of the CCD authorizes the action owner to perform their assigned CCD actions.

Note: Test scope Case Files — For unsuccessful or canceled tests, a CCD action will be assigned to return the environment to pre-test conditions. For successful tests, a CCD action will be assigned to originate a national or local scope Case File to update the impacted baseline(s).

f. CCD Appeal — The appeal process permits an Originator or NCP Evaluator an opportunity to request a re-evaluation of a rendered CCD. The appeal must be initiated within five (5) working days after a CCD is issued and recorded in the NCP. The office submitting an appeal must provide a rationale (including impacts to cost, schedule, scope, safety, or security) for the appeal. The request for appeal must be submitted to the Executive Secretariat. The Executive Secretariat must coordinate with the CCB Co-Chair(s) to disposition the appeal within 10 working days of receipt. The appeal disposition must be recorded in the NCP within five (5) working days of the Co-Chair's disposition. The disposition of an appeal is final.

8. CCD Implementation and CCD Action Closure. Upon CCB adjudication and approval, the originating organization may proceed with completing the CCD actions.

a. Test-Related Activities — A test activity is used to evaluate, validate, and verify the proposed change. The maximum duration of a test activity is limited to one (1) year from CCD approval or as specified by the authorizing CCB. Test extensions must be requested via amendment of the NCP no later than 60 days before the expiration of test duration. Test activities must terminate if the NCP is not amended prior to expiration, and the test environment must be returned to pre-test conditions to ensure compliance with FAA Order 1370.121. The authorizing CCB must maintain oversight and status accounting of all test-related CCD actions.

To implement the approved test configuration, a national or local scope Case File must be originated and must reference the test scope NCP.

b. NCP Amendment — An amendment is required to update an adjudicated NCP. The NCP number must be appended with an alpha character to clearly identify the NCP as amended.

(1) **Amendment Criteria** — The NCP amendment request must provide a justification; clearly describe the scope of changes, any updates or modifications to the impact analysis, and/or CCD actions. The supporting artifacts for the justification are determined by the scope of the NCP and the scope of the amendment. An approved NCP must be amended for the following reasons:

(a) Extend the duration of a test activity — must include test results as a supporting artifact;

(b) Add or remove approved locations for test or implementation — must include an updated test plan or waterfall schedule;

(c) When approved, CCD actions cannot be implemented in their entirety; and

(d) Site deviations and/or waivers — An amendment must be submitted when a site deviation or waiver to an approved NCP is necessary. The amendment must include:

(i) A description of the deviation or waiver from the national configuration;

(ii) The impacted requirements (e.g., installation plans and siting criteria);

(iii) The order that specifies the requirements; and

(iv) The justification for the requested deviation or waiver.

(2) **Amendment Evaluation** — Prior to scheduling the amendment for CCB adjudication, the Executive Secretariat and/or CCB CM Coordinator must review the amendment request to verify the completeness of the NCP package, which must address SRM, and validate that the amendment is still within the scope of the original proposed change.

(a) If the amendment request is outside of the scope of the proposed change, then the Originator must withdraw the amendment and initiate a new Case File to propose the new requirements.

(b) If the amendment request is within the scope of the proposed change, then the Executive Secretariat and/or CCB CM Coordinator must review the amendment to determine if additional NCP evaluations will be required before adjudication. Upon successful NCP evaluation (if required), the Executive Secretariat and/or CCB CM Coordinator must schedule the amended NCP for adjudication.

(3) **Amendment Adjudication** — Adjudication authority for an amendment is determined by the CCB governing the impacted requirement and the impacted CI. The requirements owner must be included in the evaluation of the NCP amendment and must provide concurrence prior to CCB adjudication. Upon CCB adjudication:

- (a) CCD actions completed prior to the amendment must be closed;
- (b) CCD actions impacted by the amendment must be modified; and
- (c) New CCD actions needed to implement amended NCP must be added.

c. CCD Action Implementation — CCB approval of the NCP or amended NCP authorizes the originating organization and CCD action owners to proceed with implementation, which includes:

- (1) Update and release of PCI;
- (2) Update and release of a Product's configuration information (i.e., PH); and
- (3) Performing status accounting of baseline changes.

Upon completion of implementation, the action owner must close the associated CCD action.

d. NCP Closure — The completion of all CCD actions will result in NCP closure. The Executive Secretariat and/or CCB CM Coordinator must monitor and verify that all CCD actions are complete before processing the closure of the NCP. Verification of CCD action closure must include the following:

- (1) Delivery of updated PCI or any other artifacts required by the CCD action has been completed;
- (2) Implementation of CCD actions at all applicable locations; and
- (3) Update of the product's configuration information within the MCI.

For administrative scope NCPs that do not require CCB adjudication, the closure must be completed by the Executive Secretariat and/or CCB CM Coordinator upon completion of actions for delivery (or URL) of the updated PCI and verification of update to the PCI attributes in the MCI.

9. Withdrawal. A Case File or NCP may be withdrawn at any point in the NCP process prior to CCB adjudication for any reason. The CCB may request the withdrawal of idle Case Files or NCPs. Case Files or NCPs are “idle” when one (1) year has elapsed without progress.

a. Executive Secretariats or CCB CM Coordinators must coordinate the withdrawal with the Originator. If the Originator does not withdraw the idle Case Files or NCP, then the Case File or NCP must be elevated to the authorizing CCB Co-Chair for direction.

b. The CCB Co-Chair can authorize the Executive Secretariat and/or CCB CM Coordinator to process a withdrawal.

c. If the originating organization elects to submit the proposed change for reconsideration, a new Case File must be submitted.

10. Cancellation. After CCB adjudication has occurred, if the NCP will not be implemented as approved by CCD, then the Originator must provide a justification for cancellation. The justification must include details and factors that contributed to the cancellation request and identification of any changes made to the environment.

a. The Executive Secretariat and/or CCB CM Coordinator must present the cancellation request to the CCB Co-Chairs.

b. The CCB must assign additional CCD actions to support the completion of the cancellation; including requiring CCD action owners to return any changes made to the environment to its original state.

Chapter 6. Configuration Status Accounting

CSA supports all CM processes and provides inputs to CM planning and management, configuration identification, change management, and audits. CSA provides the means to assess, validate, and report the current state of the product and the effectivity and installation status of approved changes. CSA provides the basis for evaluating the results of configuration audits.

CSA consists of the recording and reporting of information that traces the history and status of a product's configuration and approved changes throughout the product's lifecycle.

1. CSA Information. CSA information must be current, accurate, accessible, and readily available to support CM, program activities, and organizational business needs. To accomplish CSA, the following information is created from the performance of CM functions and must be recorded, stored, and organized:

- a. Configuration information throughout its lifecycle, including CIs, PCI, configuration identifiers, revisions, status, and baselines.
- b. Status of changes proposed via the NCP process from Case File origination to NCP closure.
- c. Implementation status accounting of CCD actions for products, facilities, and all controlled baselines reference the following FAA orders:
 - 6000.15, General Maintenance Handbook for National Airspace System (NAS) Facilities;
 - 6032.1, National Airspace System (NAS) Modification Program;
 - 6040.6, National Airspace System Technical Evaluation Program; and
 - 6040.15, National Airspace Performance Reporting Services (NAPRS).
- d. Results of configuration audits, including status and disposition of identified corrective actions.
- e. Metrics used to measure the effectiveness of the performance of CM functions in accordance with this order and as defined in appendix D of the NAS CCB Charter.

2. CSA Activities. The CCBs, Acquirer/Baseline Managers, and Facility Baseline Managers must maintain the integrity of the product or facility configuration information within CM data systems, which includes the MCI. CSA activity must be conducted to:

- a. Evaluate the status of baselines;
- b. Assess the product's configuration status;
- c. Assess approved changes to the product's configuration;

- d.** Assess the accuracy and timely maintenance of PCI;
- e.** Assess traceability of current and historical product configurations;
- f.** Provide traceability of all changes implemented for the product and its configuration information throughout its lifecycle;
- g.** Monitor the implementation of approved changes at all facilities until closure; and
- h.** Monitor the effectiveness, efficiency, and consistency of the performance of CM functions. The NAS CCB Executive Secretariat must provide a performance metrics report to the NAS CCB Co-Chairs semi-annually and provide recommendations for CM process improvements.

Chapter 7. Configuration Verification and Audit

The CVA function establishes a process to maintain consistency between the product and its product configuration information throughout the product lifecycle. Additionally, CVA ensures:

- a. Products have complete and accurate product definition information and applicable operation and corrective maintenance instructions, training manuals, and spare parts for repairs;
- b. Physical, functional, and interface requirements, which are defined in the approved product definition information, are achieved by the product.

CVA includes:

- a. Verification of the initial product configuration to ensure that it meets its documented configuration requirements;
- b. Verification of the incorporation of approved changes;
- c. Functional and Physical Configuration Audits; and
- d. Continuous CM process verification.

1. Configuration Verification.

a. **Product Configuration Verification.** Product verification must be performed to ensure the product or product components have been built to design specifications and complies with physical, functional, and interface requirements in approved PCI. Configuration verification is performed to ensure that the product verification is valid; it includes planning, executing, and documenting the results of verification activities.

Verification activities must be planned to ensure all requirements are addressed and the appropriate verification methods are used. The following acquisition artifacts are developed by the Acquirer and define the framework and foundation for accomplishing configuration verification:

(1) Program Requirements Document (PRD) — The PRD defines the NAS verification requirements of the system/solution, the types of verifications performed to validate the system/solution satisfies functional and performance requirements, and the acceptability of the human interface.

(2) Functional Equipment Specification — The SPEC is a set of documented requirements that a product or service must satisfy. It defines the requirements and includes the results from the needs analysis, feasibility analysis, top-level functional analysis, and critical performance requirements. The SPEC allocates requirements to functional areas and defines various functional area interfaces. The SPEC is the primary baseline repository for the functional performance requirement. The SPEC must be prepared in accordance with FAA-STD-067.

(3) Implementation Strategy and Planning Document (ISPD), T&E — The ISPD defines the program's T&E strategy, which identifies high-level aspects of verification, including resources, roles and responsibilities, site selection, scheduling, training, planning, and reporting. It addresses any planned product upgrades as well as Supplier and Acquirer/Baseline Manager roles and responsibilities.

(4) Test and Evaluation Master Plan (TEMP) — The TEMP is the primary verification management planning document for a product throughout its lifecycle, from Investment Analysis through In-Service Management. It describes the baseline verification strategy and the scope of a T&E program. The TEMP also identifies the activities to achieve verification goals and documents the T&E methodologies used to assess safety hazard controls and security risks. Reference the T&E Handbook for additional guidance on the preparation, reassessment, and validation of the TEMP.

(5) Test Plans — Test Plans document the strategy that is used to verify and ensure that a product meets its design specifications and requirements. Test Plans in this context include the verification methods of test, analysis, inspection, and demonstrations as appropriate for the particular requirement. Changes to a product's configuration and established baseline must also be verified. Verification must include examination and assessment of the achievement of the specified functional, interoperability, and interface requirements of the approved change, and the change has been incorporated in all impacted documents. When a test scope NCP is proposed, the Originator must submit test plans before NCP evaluation.

(6) Test Procedures — Formal specification of test cases to be applied that includes all of the details for conducting a particular test to verify requirements as specified in the respective Test Plan(s).

(7) Test Results — At the completion of testing activities, the Originator must submit test results documenting the accomplishment of configuration verification execution. The test results are a requirement to complete the closure of a test scope change proposal.

b. CM Process Verification. Verification of CM processes must be accomplished to ensure configuration changes are documented, implemented, and consistently executed in accordance with this order. CM process reviews must be conducted by the NAS CCB semi-annually or when CM process performance metrics indicate a need for an assessment. CM process reviews include verification that CM processes:

- (1) Are sufficiently documented;
- (2) Are implemented and effective;
- (3) Achieve desired outcomes; and
- (4) Are accomplished with consistency.

2. Functional Configuration Audit/Physical Configuration Audit. FCA/PCA ensures the product's configuration is maintained and only authorized changes are made. Configuration

audits verify the functional and physical characteristics of the solution satisfies the defined requirements.

Before a Product Baseline is established, FCA/PCA ensures configuration verifications are accomplished, and an assessment of the approved documented functional and physical requirements is completed to support the establishment of baselines. Audits support the requirements in the latest edition of FAA Order JO 7210.634, Air Traffic Organization (ATO) Quality Control, ensuring the product satisfies the approved requirements. FCA/PCA validates the functional performance and physical configuration against the documented requirements.

The FCA and PCA validate that the performance satisfies the approved product requirement, SPEC, and documentation (e.g., PCI). The Acquirer and Operations & Maintenance organization of the product must ensure the FCA/PCA is conducted against the current approved requirements, inclusive of all approved changes. The Acquirer/Baseline Manager is responsible for ensuring audit findings are tracked, monitored, assigned, and completed.

3. Facility Configuration Audits. The Facility Baseline Manager is responsible for the documented configuration of their respective facilities as prescribed by FAA-STD-058. The Facility Baseline Manager and Service Area Managers must support the conduct of a PCA. PCA is conducted to validate and verify products are designed, configured, and installed at a facility per FAA standards and practices. The best practice is to audit the facility annually. The Facility Baseline Manager must ensure all open actions identified in the PCA report are completed prior to establishing or re-establishing the facility's baseline. Audit reports must be maintained in a support library that is accessible to the SACCB.

Chapter 8. Data Management

Data Management consists of disciplined processes and systems that plan for, acquire, and provide stewardship for product and product-related data. This order addresses product data and the business data required for collaboration during a product's lifecycle. When data is created from the performance of CM functions using FAA resources, the data assets belong to the FAA. Data assets are subject to data administration, metadata management, records management, and other FAA processes.

Data Management is essential to the performance of CM functions as it allows data to be shared, analyzed, and combined with other data to extract meaning and provide information. Data Management allows for the exchange of information between data systems used to track the product, from investment analysis to in-service management phases of the FAA AMS lifecycle.

1. CM Information and Data. This order recognizes CM information and data as a valuable asset to the operations of the FAA, and as such, it must be managed in accordance with the latest edition of FAA Order 1375.1. CM data must retain its accuracy, timeliness, and relevancy to the business processes. Product baseline data must be placed under configuration control early in the acquisition lifecycle once requirements have been established.

Since acquisition methods and strategies influence the levels of CM activities throughout a product's lifecycle, Acquirers must ensure acquisition and contractual artifacts are available to decision-makers, CM practitioners, data consumers, OPRs, and OPIs to support impact and service analysis for future changes to the product. The following information must be stored and maintained throughout the lifecycle of the product:

- a.** Acquisition and contractual artifacts (e.g., Shortfall Analysis, Concept of Operations (ConOps), Functional Analysis Document (FAD), PRD, ISPD, TEMP, Integrated Logistics Support Plan (ILSP), Memorandum of Understanding/Agreements, Service Level Agreements (SLA), and BOM);
- b.** In-Service Decision artifacts (e.g., In-Service Record of Decision, waterfall schedule, In-Service Review checklist, Action plans, and CSA reports);
- c.** Product and facility baseline configuration information (e.g., Document identifiers and titles, baseline document source files, test plans, and reports, and COTS manuals);
- d.** Program management information (e.g., schedule, minutes, agenda, briefing materials, critical events, deliverables, and Statement of Work);
- e.** Configuration Change Management and maintenance data (e.g., ECP, SCP, NCP, and SSD); and
- f.** Audit data, such as audit plans and reports.

2. CM Data Categories. The FAA captures three categories of CM data: business, product, and operational. For each category, the ATO must support:

- a. The collection of CM data and information throughout a product's lifecycle;
- b. The application of security per the latest edition of FAA Order 1370.121 and FAA Order 1600.75, Protecting Sensitive Unclassified Information (SUI); and
- c. The application of quality controls throughout the product's lifecycle.

3. CM Data Controls. CM data is controlled so that changes to data are reviewed and authorized by the appropriate personnel, and results are provided on a need-to-know basis. This order defines the control processes that must be applied as part of Data Management:

- a. Configuration Identification, per chapter 4;
- b. The NCP process and CCBs; per chapter 5;
- c. Configuration Status Accounting, per chapter 6;
- d. User access controls; and
- e. Standard operating procedures within the CM Manual.

4. Official CM Information System. The official CM information system is used to manage and maintain the following data and information:

a. Organization CM Profiles — Organizations that participate in Configuration Change Management activities must establish and maintain the organization's CM profile. The organization's CM profile supports routing via the NCP process; therefore, the profile must identify:

- (1) Official FAA organizational name and organizational routing code;
- (2) Functional description of organization;
- (3) Signature authorities within the organization;
- (4) An Organizational CM Coordinator(s);
- (5) CIs under the purview of the organization;
- (6) Location of PSL;
- (7) FAA Orders, Standards, Specifications, and other PCI where the organization is the OPR (i.e., maintains the source file);
- (8) FAA Orders, Standards, Specifications, and other PCI where the organization is an OPI (i.e., stakeholder);

- (9) Acquirers and/or Baseline Managers;
- (10) SMEs for Impact Analysis;
- (11) Case File Prescreen Reviewers; and
- (12) NCP Evaluators and their associated evaluation criteria, which can be based on:
 - (a) CI
 - (b) Baseline
 - (c) Scope/Reason for Change
 - (d) Document Type
 - (e) Document Identifier
 - (f) Subject matter (e.g., Safety and Security).

b. CCB CM Profiles — CCBs must establish and maintain their CM profile which is inclusive of:

- (1) CCB name;
- (2) CCB CM Coordinators;
- (3) Prescreening Organizations;
- (4) Scope of Authority (i.e., appendix A of the CCB Charter); and
- (5) Members (i.e., appendix B of the CCB Charter).

c. Product CM Profiles — Capture the product's attributes, including:

- (1) Product acronym/nomenclature;
- (2) Assigned configuration identifiers;
- (3) CCB name;
- (4) OPRs/OPIs;
- (5) Related FAA Orders, Standards, Specifications, and baselined PCI; and
- (6) FSEP LOCID, Cost Center Codes, FAC, FIC, and Class(es).

5. MCI. The MCI is the FAA's official data repository for configuration-controlled CM information for all NAS products, facilities, and their associated CIs and PCI. Product and

facility baselines must be established in the MCI to provide the basis from which changes are managed and status-accounting audits are conducted. The MCI must support the accomplishment of all CM functions and provide:

- a. Control of CM data, data elements, data structures, and data views;
- b. Relationships between data resultant from business (Program), product, and operational activities, including:
 - (1) Product/CIs and the EA;
 - (2) Product/CIs and programs;
 - (3) Product/CIs and CCBs; and
 - (4) Product/CIs and FAA Orders, Standards, Specifications, and baselined PCI.
- c. Traceability of the product and product CIs to their baselines and all approved configuration changes throughout the product's lifecycle;
- d. The ability to access real-time product data in multiple views, including a hierarchical representation of each product down to the LRU; and
- e. A mechanism to request, record, and report the assignment of unique identifiers for all CIs and associated configuration information.

6. Other Sources of Configuration Information. Configuration information for NAS products can also be found in the following data systems:

- FAA Acquisition System Toolset (FAST)
- FAA Technical Library Catalogue
- Facility Service Equipment Profile (FSEP)
- Logistics Center Support System
- NAS Technical Library
- MyFAA Orders and Notices
- Remote Monitoring Logging System (RMLS)
- Systems Engineering Portal
- TechNet

Appendix A. Related Publications

All employees and contractors at all levels of the ATO and its Service Units engaged in the FAA AMS lifecycle for NAS products, equipment, infrastructure, and facilities must comply with the Acquisition Management Policy, this order, and the orders, specifications, and standards referenced in this appendix in the performance of CM.

1. FAA Orders.

- **Order 1000.36**, FAA Writing Standards
- **Order 1000.37**, Air Traffic Organization Safety Management System
- **Order 1320.1**, FAA Directives Management
- **Order 1320.58**, Instructions for Writing Notices, Maintenance Technical Handbooks, and System Support Directives
- **Order 1370.121**, FAA Information Security and Privacy Program & Policy
- **Order 1375.1**, Information/Data Management
- **Order 6000.15**, General Maintenance Handbook for National Airspace System (NAS) Facilities
- **Order 6000.5**, Facility, Service and Equipment Profile (FSEP)
- **Order 6000.55**, National Facility Drawing Library Procedure
- **Order 6010.7**, Joint Acceptance Inspection
- **Order 6032.1**, National Airspace System (NAS) Modification Program
- **Order 6040.6**, National Airspace System Technical Evaluation Program
- **Order 6080.1**, Using Facility Power Panel Schedule (FPPS)
- **Order 6200.4**, National Test Equipment Program Management
- **Order 6700.20**, Non-Federal Navigational Aids, Air Traffic Control Facilities, and Automated Weather Systems
- **Order 7210.634**, Air Traffic Organization (ATO) Quality Control

2. Specifications.

- **FAA-D-2494**, Technical Instruction Book Manuscript: Electronic, Electrical, and Mechanical Equipment, Requirement for Preparation of Manuscript and Production of Books
- **FAA-G-2100**, Electronic Equipment, General Requirements

3. Standards.

- **FAA-STD-002**, Engineering Drawing Preparation & Support

- **FAA-STD-013**, Quality Control Program Requirements
- **FAA-STD-016**, Quality Control System Requirements
- **FAA-STD-018**, Computer Program Quality Program Requirements
- **FAA-STD-019**, Lighting and Surge Protection, Grounding, Bonding, and Shielding Requirements for Facilities and Electronic Equipment
- **FAA-STD-023**, Microfilming of Engineering and Electrical Drawings
- **FAA-STD-024**, Content and Format Requirements for The Preparation of Test and Evaluation Documentation
- **FAA-STD-025**, Preparation of Interface Documentation
- **FAA-STD-026**, Software Development for the National Airspace System(NAS)
- **FAA-STD-031**, Preparation of Statements of Work
- **FAA-STD-032**, Design Standards for National Airspace System Facilities
- **FAA-STD-033**, Design Standards for Energy Management in NAS Physical Facilities
- **FAA-STD-035**, Commercial Electronic Equipment, Market Research
- **FAA-STD-036**, Preparation of Program Implementation Plans
- **FAA-STD-039**, National Airspace System (NAS) Open System Architecture and Protocols
- **FAA-STD-042**, National Airspace System (NAS) Naming and Addressing Structure for Ground-To-Ground Communication
- **FAA-STD-043**, National Airspace System (NAS) Open System Interconnection (OSI) Priority
- **FAA-STD-045**, National Airspace System (NAS) Communications Security Protocols and Mechanisms
- **FAA-STD-048**, National Airspace System (NAS) Open Systems Interconnection (OSI) Interoperability Standard
- **FAA-STD-054**, Use of Selective Signaling Standard for Voice Communication Systems
- **FAA-STD-058**, Standard Practice, Facility Configuration Management
- **FAA-STD-059**, Standard Practice, NAS Terminal Facility Master Plan Guidelines for Existing Terminal Facilities
- **FAA-STD-060**, Standard Practice for Logical Modeling, Documenting, and Registering Data Elements
- **FAA-STD-061**, Design Standard, Airport Fiber Optic Transmission System (FOTS)
- **FAA-STD-063**, Standard Practice, XML Namespaces

- **FAA-STD-064**, Standard Practice, Web Service Registration
- **FAA-STD-065**, Standard Practice, Preparation of Web Service Description Documents
- **FAA-STD-066**, Web Service Taxonomies
- **FAA-STD-067**, Standard Practice, Preparation of Specifications
- **FAA-STD-068**, Standard Practice, Preparation of Standards
- **FAA-STD-069**, Standard Practice, Preparation of Handbooks
- **FAA-STD-072**, Standard Practice, Documenting & Registering Taxonomies
- **FAA-STD-073**, Standard Practice, Preparation of JAVA Messaging Service Description Documents
- **FAA-STD-074**, Standard Practice, Preparation of Service Requirements Documents

4. Other Publications.

- ATO Safety Management System Manual
- Safety Risk Management Guidance for System Acquisitions (SRMGSA)
- FAA System Engineering Manual (SEM)
- FAA Security Authorization Handbook
- SAE Standard EIA-649, Configuration Management Standard
- SAE Standard GEIA-859, Data Management
- CM Manual
- National Technology Transfer and Advancement Act (NTTAA)
- Test & Evaluation Handbook
- FAA Plain Language Manual
- United States Government Publishing Office (GPO) Style Manual

Appendix B. Acronym List

| Acronym | Name |
|----------------|---|
| AMS | Acquisition Management System |
| ARTCC | Air Route Traffic Control Center |
| ATCSCC | Air Traffic Control System Command Center |
| ATCT | Air Traffic Control Tower |
| ATM | Air Traffic Management |
| ATO | Air Traffic Organization |
| BOM | Bill of Materials |
| CAEG | Computer-Aided Engineering Graphics |
| CAGE | Commercial and Government Entity |
| CCB | Configuration Control Board |
| CCD | Configuration Control Decision |
| CDRL | Contract Data Requirements List |
| CERAP | Combined Center Radar Approach Control |
| CI | Configuration Item |
| CM | Configuration Management |
| CMP | Configuration Management Plan |
| ConOps | Concept of Operations |
| COTS | Commercial-Off-The-Shelf |
| CPFS | Computer Program Functional Specification |
| CSA | Configuration Status Accounting |
| CSAR | Configuration Status Accounting Report |
| CVA | Configuration Verification and Audit |
| CWC | Concur With Comment |
| CWOC | Concur Without Comment |
| DBDD | Database Design Description |
| DID | Data Item Description |
| DLA | Defense Logistics Agency |
| DMS | Directives Management System |
| EA | Enterprise Architecture |
| ECP | Engineering Change Proposal |
| EDMS | Enterprise Document Management System |

| Acronym | Name |
|----------------|---|
| eLMS | Electronic Learning Management System |
| EPI | Enterprise Product Identifier |
| FA-Type | FAA-Type Designation Number |
| FAA | Federal Aviation Administration |
| FAC_TYPE | Facility Type |
| FACID | Facility ID |
| FAD | Functional Analysis Document |
| FAST | FAA Acquisition System Toolset |
| FCA | Functional Configuration Audit |
| FDD | Functional Design Description |
| FDRW | Facility Drawing |
| FIC | Facility Identification Code |
| FID | Final Investment Decision |
| FPPS | Facility Power Panel Schedule System |
| FSEP | Facility System and Equipment Profile |
| ICD | Interface Control Document |
| IID | Initial Investment Decision |
| ILSP | Integrated Logistics Support Plan |
| IPT | Integrated Product Teams |
| IRD | Interface Requirements Document |
| ISD | In-Service Decision |
| ISPD | Implementation Strategy and Planning Document |
| ISRC | In-Service Review Checklist |
| JAI | Joint Acceptance Inspection |
| JMSDD | Java Messaging Services Description Document |
| JRC | Joint Resources Council |
| LCSS | Logistics Center Support System |
| LOA | Letter of Authorization |
| LOB | Lines of Business |
| LOCID | Location Identifier |
| LRU | Line Replaceable Unit also known as Lowest Replaceable Unit |
| MCI | Master Configuration Index |
| MMAC | Mike Monroney Aeronautical Center |

| Acronym | Name |
|---------|---|
| MOA | Memorandum of Agreements |
| MOD | Modification |
| MOU | Memorandum of Understanding |
| MTHB | Maintenance Handbook |
| NAPRS | National Airspace Performance Reporting Services |
| NAS | National Airspace System |
| NCP | NAS Change Proposal |
| NCWC | Non-Concur with Comment |
| NSN | National Stock Number |
| O&M | Organization responsible for Operations and Maintenance |
| OPI | Office of Primary Interest |
| OPR | Office of Primary Responsibility |
| ORD | Operational Readiness Decision |
| OT&E | Operational Test and Evaluation |
| PAT | Production Acceptance Testing |
| PBLI | Product Baseline Index |
| PCA | Physical Configuration Audit |
| PCI | Product Configuration Information |
| PDI | Product Definition Information |
| PDR | Preliminary Design Review |
| PH | Product Hierarchy |
| PMO | Program Management Office |
| POC | Point of Contact |
| POI | Product Operational Information |
| PRD | Program Requirements Document |
| PRR | Production Readiness Review |
| PSF&I | Power Systems, Facilities, and Infrastructure |
| PSL | Program Support Library |
| RDP | Reutilization and Disposition Plan |
| RMA | Reliability, Maintainability and Availability |
| RMLS | Remote Monitoring and Logging System |
| SACCB | Service Area Configuration Control Board |
| SCP | Services Change Proposal |

| Acronym | Name |
|---------|-------------------------------------|
| SDD | Software Design Description |
| SDL | Software Development Library |
| SDP | Software Development Plan |
| SEM | FAA Systems Engineering Manual |
| SEN | Safety Emergency Notice |
| SEP | Systems Engineering Portal |
| SIR | Screening Information Request |
| SLA | Service Level Agreement |
| SLE | Second Level Engineering |
| SLEP | Service Life Extension Program |
| SME | Subject Matter Expert |
| SMO | System Management Office |
| SMS | Safety Management System |
| SOP | Standard Operating Procedure |
| SPEC | Specification |
| SRD | Services Requirements Document |
| SRM | Safety Risk Management |
| SRR | System Requirements Review |
| SRS | Software Requirements Specification |
| SSD | System Support Directive |
| SSDD | Software/System Design Description |
| SSM | System Support Modification |
| SSR | System Specification Review |
| STD | Standard |
| SUI | Sensitive Unclassified Information |
| SUM | Software User Manual |
| T&E | Test and Evaluation |
| TEMP | Test and Evaluation Master Plan |
| TI | Technical Issuance |
| TIB | Technical Instruction Book |
| TRACON | Terminal Radar Approach Control |
| URL | Uniform Resource Locator |
| VDD | Version Description Document |

| Acronym | Name |
|---------|------------------------------------|
| VP | Vice President |
| WJHTC | William J. Hughes Technical Center |
| WSDD | Web Service Description Document |

Appendix C. Definitions

| Term | Definition |
|----------------------|---|
| Acquirer | An FAA Program Office, Program Manager, or Service Team Lead, that commissions the engineering or design of a product, is a prospective purchaser of the end-use products or a portion thereof; is the procurer of a product; is a user or consumer of a product. |
| Administrative Scope | Administrative scope changes are generally a correction of typographical errors or the addition of information that affects the configuration documentation, not the CI, and therefore does not affect, or have the potential to affect end item use, form, fit or function, interface, or any other performance requirements or characteristics. This scope must be used to request CI assignment/reassignment to OPRs and CCBs. |
| Allocated Baseline | The Allocated Baseline represents the Supplier's solution to the functional requirements and allocates the requirements, specifications, interfaces, or performance requirements to a product and its components. If elected, the Allocated Baseline is established and maintained by the Supplier and approved by the Acquirer. The Acquirer must verify and approve the Allocated Baseline after the PDR. This baseline ensures traceability is maintained between the Functional Baseline and all changes managed by the Acquirer until the Product Baseline is established. The Acquirer must establish the Allocated Baseline after PDR. |
| Assembly | Consists of a number of parts or subassemblies or any combination thereof, joined together to perform a specific function and capable of disassembly. The assembly may be the 2nd or 3rd level of a product hierarchy, depending on a product's design. |

| Term | Definition |
|------------|---|
| Attributes | <p>A quality or characteristic of an item.</p> <p>A functional attribute is a measurable performance characteristic expressed in terms of quantitative parameters; e.g., range, speed, reliability, maintainability, resiliency, safety, and operational and logistical parameters, including their respective tolerances where applicable.</p> <p>A physical attribute is a quantitative and qualitative characteristic of material, including interfaces; e.g., composition, dimensions, finishes, source and object code, compilation information, complexity level, data structure, platform, and drivers.</p> <p>A data attribute is information, which determines the properties of a field or tag in a database or a string of characters in a display (i.e., version, volume, change level, approval date, title, OPR, URL to source location). Also known as Metadata.</p> |
| Audit | <p>A systematic, independent, and documented process for obtaining evidence and evaluating it objectively to determine the extent to which pre-defined criteria are fulfilled. Conducted by authorized individuals for the purpose of assessing compliance with established design/performance requirements, commercial and appropriate FAA standards, and functional, allocated, and Product Baselines as appropriate.</p> |
| Baseline | <p>A baseline is the result of a point-in-time inspection or audit as a basis for establishing a benchmark used for measurement and control. As defined in AMS, a baseline is any of the following:</p> <ul style="list-style-type: none"> (1) An agreed-to-description of the attributes of a product or service at a point in time, which serves as a basis for defining change; (2) An approved and released document or a set of documents that provide a defined basis for managing change; (3) Currently approved and released configuration documentation; or, (4) A released set of files consisting of a software version and associated configuration documentation. |

| Term | Definition |
|------------------|--|
| Baseline Manager | Has overall responsibility for managing and maintaining the product's baseline and applies resources for the engineering analysis of proposed changes. Baseline management may change throughout the product lifecycle. For example, the Acquirer fulfills the Baseline Manager role while the product is in acquisition. The Baseline Manager role will transition from the Acquirer to the O&M organization when the product achieves operational status. |
| BOM | Comprehensive list of parts, items, assemblies, and other materials required to create a product, as well as instructions required for gathering and using the required materials. |
| Capital Asset | Property of any kind held by a business or organization. It includes all kinds of property, movable or immovable, tangible or intangible, fixed or circulating. Defined in AMS Policy. |
| Case File | The data and information required to propose a change or establish a NAS baseline. |
| CCD Action | A discrete task or activity that is approved by a CCB and is required to test or implement a proposed change to controlled CIs and PCI. |
| CAGE Code | A five-character identification number used extensively within the federal government, assigned by the Department of Defense's DLA. The CAGE Code supports a variety of mechanized systems throughout the government and provides a standardized method of identifying a given legal entity at a specific location. |
| COTS | A product or service developed for sale, lease, or license to the public and is currently available commercially at a fair market value; requires no development and can be integrated without modification. Note: Modified COTS (MCOTS) - A COTS product whose established commercial baseline was modified to satisfy an approved requirement or specification and must be distinguished from the original COTS product. |
| Component | A physical or functional element supporting a product requirement. A component requires a host system to function and is often described as the LRU. |
| ConOps | The ConOps is a description of what is expected from the solution. It describes the existing solution, current environment, users, interactions between users and the solution, and organizational impacts. It defines the way the solution will be used and involves input from a broad range of stakeholders, such as operations, maintenance, and management personnel. Defined in the SEM. |

| Term | Definition |
|---|--|
| Configuration Audit | The examination of artifacts related to a product to verify it has achieved the required functional and performance requirements and that the product design is accurately documented. The audit includes the review of documents, records, procedures, processes, and physical elements of the product. Sometimes the configuration audit consists of separate functional and physical configuration audits. Defined in AMS Policy. |
| Configuration Control | The systematic proposal, justification, evaluation, coordination, disposition of proposed changes or requested variances, and the implementation of all approved changes or variances in the configuration after the establishment of a configuration baseline. |
| Configuration Control Board (CCB) | The official FAA forum for establishing configuration baselines and approving subsequent changes to those baselines. AMS policy requires the following configuration control boards: service organizations, service areas, Mission Support, information technology, line of business staff offices, and solution providers. Defined in AMS Policy. |
| Configuration Control Board (CCB) CM Coordinator | Supports administration of CCB operations and coordinates CM activities. |
| Configuration Control Board (CCB) Co-Chair | An FAA Executive at the director level or an FAA employee delegated with authority to adjudicate an NCP and approve associated CCD actions. A Co-Chair or designee must ensure they are available for adjudication. Delegation of authority for Co-Chairs must be submitted to the NAS CCB. |
| Configuration Control Board (CCB) Executive Secretariat | Administers all CCB operations and supports configuration change management. |
| Configuration Control Board (CCB) Permanent Member | An FAA employee who is a voting member with delegated authority representing their organization. Permanent members provide their organization's perspective and recommendations to the co-chairs for NCPs scheduled for adjudication. Permanent members are responsible for ensuring their organization is represented at each CCB meeting. Delegation of authority for permanent members must be submitted to their CCB co-chair. |
| Configuration Control Decision (CCD) | A decision rendered by a CCB for a proposed change. |
| Configuration Identification | Systemic process of assigning and applying unique configuration identifiers to a product and its components. Defined in AMS Policy. |

| Term | Definition |
|-------------------------------------|--|
| Configuration Item (CI) | A product, allocated components of a product, or both that satisfies an end-use function has distinct requirements, functionality, and/or product relationships and is designated for configuration control. This designation occurs when the NAS Functional Baseline is updated, and a Functional Baseline is established. The product and allocated components may be a service, hardware, software, or a combination of both that satisfies an end-use function as described in the product/solution requirement. The NCP process is used to manage configuration control of baselines of CIs. |
| Configuration Management (CM) | Configuration Management is a set of inter-related processes, management methodologies, and tools that ensure NAS products and facilities are what they are specified to be. CM ensures changes to NAS products are controlled (i.e., evaluated, authorized, documented, implemented, and traceable) throughout the product's lifecycle and information that defines or is used to manage and maintain the product is accurate, organized, and accessible to support the needs to all who need to know. CM processes result in accurate configuration information to facilitate product interchangeability and consistent reproducibility and thus contribute to continuous safe and effective product development, production, operations, sustainment, and retirement. |
| Configuration Management Plan (CMP) | A living document describing how a product configuration is managed throughout the lifecycle. Initially developed by the Acquirer and updated as the product matures through its lifecycle to reflect changes in baseline management. The Supplier CM plan supports the FAA's CMP. |
| Configuration Status Accounting | CM activity that captures, stores, and accesses configuration information needed to manage products and product information effectively. Defined in AMS Policy. |
| Configuration Verification | Action that verifies the product has achieved its required attributes (performance requirements and functional constraints) and its product design is documented accurately. Defined in AMS Policy. |
| Data Item Description (DID) | A document that defines the data required from a contractor. It specifically defines the data content, format, and intended use. The DID library is a database located on the FAA Acquisition System Toolset that contains standard and tailored DIDs organized within specific functional disciplines for use by service organizations and program offices when preparing screening information requests and FAA contracts. Defined in AMS Policy. |
| Decommissioning | A formal process within FAA for removing an operational asset from active status. Note that decommissioning and disposal are separate actions. Defined in AMS Policy. |

| Term | Definition |
|---------------------------------------|--|
| Deviation | See Variance; normally represents a modification that still satisfies the requirement. |
| Disposal | The process of removing and disposing of systems, equipment, services, products, facilities, real property, and resources no longer needed for operational use. Within the FAA, disposal is the responsibility of the service organization or program office installing a new capability. Disposal includes restoration of sites, disposal of government property, recovery of precious metals, and cannibalization of useful assets. Defined in AMS Policy. |
| Engineering Change Proposal (ECP) | The documentation by which a proposed engineering change is described, justified, and submitted to (a) the current document change authority for approval or disapproval of the design change in the documentation and (b) to the procuring activity for approval or disapproval of implementing the design change in units to be delivered or retrofit into assets already delivered. ECPs are initiated by the Supplier and approved by the Acquirer in consultation with the Baseline Manager. |
| Enterprise Architecture (EA) | Defines the operational and technical framework for all capital assets of the agency. It is comprised of the NAS Enterprise Architecture and the Mission Support Enterprise Architecture. The NAS Enterprise Architecture is a repository of architectural views that describe the current (as-is), mid-term, and far-term (to-be) perspectives of the NAS architecture, as well as a strategic roadmap for transitioning from the “as is” to the “to be” architecture. The Mission Support Enterprise Architecture contains the information technology assets and investments needed by the agency for business planning and administration. It includes all mission-support applications, systems, policies, and procedures not directly involved in air traffic control. Defined in AMS Policy. |
| Enterprise Product Identifier (EPI) | An EPI provides the basis for lifecycle traceability and crosswalk of NAS products to the EA, the MCI, and other CM information systems. The EPI is a unique identifier assigned to products and must be assigned upon the submission of the SPEC, but no later than FID. |
| FAA Type Designation Number (FA-Type) | The FAA Type Designation Number (FA-Type) must be assigned to hardware-based assemblies and components modified to FAA specifications. This assignment distinguishes the equipment from Commercial-Off-The-Shelf (COTS) equipment. FA-Type numbers are not required for COTS equipment or non-federal facilities. The Acquirer/Baseline Manager may choose to waive the requirement for FA-Type number assignment. |
| Facility | A building, structure, or other aspects, including utility systems, pavements, and land. Defined in AMS Policy. |

| Term | Definition |
|------------------------------------|--|
| Facility Baseline | A Facility Baseline is comprised of a drawing set used to support capital investment planning, security, resiliency, product installation, and changes to a facility's operational environment. The decision whether to establish or modify a Facility Baseline is determined by assessing the impact of FAA projects, as well as Service Area and locally initiated changes and improvements. |
| Facility Baseline Manager | An FAA management official who is responsible for maintaining the configuration of the facility (buildings and associated property) in accordance with FAA-STD-058. The Facility Manager authorizes product installation at the facility. |
| Final Investment Decision (FID) | The event at which the Joint Resources Council decides whether it will approve, fund, and baseline a proposed investment initiative. Defined in AMS Policy. |
| Firmware | Firmware is a specific class of computer software that provides low-level control for a device's specific hardware. |
| Fit | The ability of a product to interface or interconnect with or become an integral part of another product. |
| Form | The shape, size, dimensions, and other physically measurable parameters that characterize a product. |
| Function | The action or actions that a product is designed to perform in fulfilling its purpose. |
| Functional Analysis | A process that transforms an operational need or market opportunity into a product or service description that supports detailed design. Defined in AMS Policy. |
| Functional Analysis Document (FAD) | <p>The FAD documents the functional architecture that addresses needs and shortfalls and supports existing and new operational concepts and business processes. It draws input from the Shortfall Analysis Report, the ConOps, and the Business Process Models, as well as from functions and requirements allocated to the program by the NAS Enterprise Architecture and NAS Requirements Document. Defined in the SEM.</p> <p>It precedes and forms the basis of the functional requirements in the PRD. Defined in AMS Policy.</p> |
| Functional Architecture | The functional architecture consists of a functional hierarchy and associated functional behavioral descriptions (functional flows and data flows) that represent the complete solution. Defined in the SEM. |

| Term | Definition |
|--|--|
| Functional Baseline | The Functional Baseline is the approved documentation set describing the product’s functional, performance, interoperability, and interface requirements, as well as the verifications required to demonstrate achievement of those specified requirements. This baseline is required and is used to evaluate the impact of future changes to agency-approved requirements and must be maintained throughout the product’s lifecycle. The Acquirer must establish the Functional Baseline prior to or directly after FID or release of SIR — whichever occurs first. For products developed internally to the FAA, the Functional Baseline must be established prior to any development. |
| Functional Configuration Audit (FCA) | The formal examination of the “as-tested” functional characteristics of a configuration item. The audit determines whether the item has achieved the requirements specified in its Functional Baseline documentation and identifies and records any discrepancies. Defined in AMS Policy. |
| Functional Requirements | Define the functions of a product or service or of its components. Functional requirements drive the application architecture of a product or service, while non-functional requirements drive the technical architecture. Defined in AMS Policy. |
| Hardware | Products made of material and their components (mechanical, electrical, electronic, hydraulic, and pneumatic) and physical parts. Computer software and technical documentation are excluded. |
| Impact Analysis | An analysis to determine the impacts of the change, including safety, resiliency, RMA, logistics, cost, schedule, updates to CI/PCI, and the impacted organizations required to assess and validate the proposal. |
| Implementation Strategy and Planning Document (ISPD) | Conveys critical, relevant, and meaningful program planning information to the Joint Resources Council as a basis for investment decision-making. The ISPD integrates all aspects of planning for solution implementation and in-service management of a proposed investment program; e.g., acquisition planning, management, and control, schedule, systems engineering, solution development and production, physical and functional integration, integrated logistics support, safety and health, security and privacy, test and evaluation, and deployment. Defined in AMS Policy. |
| Initial Investment Decision (IID) | The event at which the Joint Resources Council decides whether to select a solution for implementation and authorize entry into final investment analysis or to reject or return a proposed investment for further analysis. Defined in AMS Policy. |

| Term | Definition |
|---------------------------------|--|
| In-Service Decision | The event at which the decision authority decides whether to accept a product or service for operational use. It occurs during the solution implementation phase of the FAA lifecycle management process. This decision allows deployment activities to begin at each installation site. The Joint Resources Council designates the in-service decision authority at the final investment decision and may retain authority for the decision. Defined in AMS Policy. |
| In-Service Management Phase | The timeframe in the FAA lifecycle management process extending from the decision to approve a product or service for operational use and continuing until it is retired from service. Defined in AMS Policy. |
| In-Service Record of Decision | The artifact prepared by the In-Service Executive Secretariat that specifies the decisions and conditions of the in-service decision. It includes as an attachment the plan that specifies all actions the service organization or program office must complete as a condition of the in-service decision. Defined in AMS Policy. |
| In-Service Review Checklist | Document the service organization or program office uses to identify and resolve readiness issues before the in-service decision and to obtain concurrence from stakeholder organizations that readiness issues have been or will be resolved. Defined in AMS Policy. |
| Integrated Logistics Support | The management discipline employed to plan, establish, and maintain a full lifecycle support system for FAA products and services. It applies to the sustainment and disposal of fielded products and services, as well as new investment programs. The objective is to sustain the required level of service to the end user at optimal lifecycle cost to the FAA. Defined in AMS Policy. |
| Interface | The performance, functional, and physical attributes required to exist at a common boundary. Defined in AMS Policy. |
| Interface Control Document | A drawing or other documentation that depicts physical, functional, and test interface characteristics between two or more related or co-functioning items. Defined in AMS Policy. |
| Interface Requirements Document | The artifact that specifies the interface requirements to a product or system. It may describe the inputs and outputs of a single product or system or the interface between two products or systems. Defined in AMS Policy. |
| Interoperability | The ability to exchange information and operate effectively together. |
| Investment | An expenditure of resources (financial or labor) to obtain a product or service for use in the NAS. |

| Term | Definition |
|----------------------------------|---|
| Key Site | Location at which a new capital asset or service is first tested and evaluated for operational use. This typically entails a demonstration that the new asset or service satisfies functional and performance requirements in the program requirements document and is fully supported and operable by the FAA workforce. Defined in AMS Policy. |
| Lifecycle | The entire spectrum of activity for an FAA capital asset starting with the identification of service need and extending through design, development, production or construction, deployment, operational use, sustaining support, and retirement and disposal. Defined in AMS Policy. |
| Line Replaceable Unit (LRU) | An essential support item removed and replaced at the field level to restore an end item to an operationally ready condition. Also known as the lowest replaceable unit. |
| Local Scope | Local scope must be used for proposed changes to a NAS facility or multiple facilities within a Technical Operations district. The adjudication authority of a local scope is based on the impacted facility and PCI, as identified in appendix A of a Service Area CCB charter. |
| Master Configuration Index (MCI) | The MCI is the FAA's official data repository of approved and authorized NAS product baseline information consisting of CIs and PCI that supports full lifecycle traceability. |
| Memorandum of Agreement | A written document executed by the parties, which creates a legally binding commitment and may require the obligation of funds. However, when the FAA acquires services, equipment, personnel, or facilities from a contractor for the direct benefit or use of the FAA, the acquiring organization must use a procurement contract. Defined in AMS Policy. |
| Memorandum of Understanding | A written document executed by the parties that establishes policies or procedures of mutual concern. It does not require either party to obligate funds and does not create a legally binding commitment. Defined in AMS Policy. |
| Metadata | Date about data, properties (title, document number, creation date, etc.) used to identify or define a data item. |
| Mission Support Products | Products designated as non-NAS that support regulatory requirements, certification, oversight activities, and administrative functions critical to the FAA's mission. |

| Term | Definition |
|-----------------------------------|--|
| NAS Change Proposal (NCP) Process | The means for baselining NAS CIs or proposing changes to baselined NAS CIs. The NCP process consists of three (3) phases, (1) Case File Origination and Prescreening, (2) NCP Evaluation and Adjudication, and (3) CCD Implementation and CCD Action Closure. An NCP identifies the CI to be baselined or modified, describes the recommended change, and provides sufficient information so that the proposed change can be thoroughly evaluated. |
| NAS Functional Baseline | The technical portion of the NAS Architecture defines and translates services, capabilities, and implementation steps into design solutions and their required technical characteristics. The technical characteristics are defined as “NAS-Level Requirements,” which explicitly translate the operational needs of the agency into functional, performance, and constraint requirements that are sufficient to direct the appropriate design and development of NAS systems. |
| NAS Requirements Document | The top-level source for programs to use when deriving their respective requirements for the National Airspace System. The document defines requirements without constraining technical design alternatives, while also identifying global design principles necessary to evolve the NAS. The document supports National Airspace System design, enterprise architecture engineering, and acquisition activities for new and upgraded systems, as well as routine changes to operational equipment. Defined in AMS Policy. |
| National Airspace System (NAS) | A complex system of systems; composed of airspace, airports, landing areas, aircraft, pilots, air navigation facilities, and ATC facilities; communication, navigation, and surveillance services and supporting technologies and systems; operating rules, regulations, policies, procedures; technical information, training and individuals who implement, sustain, or operate the system components. The NAS includes systems and components that are shared jointly with the military. |
| National Scope | National scope must be used to establish or modify the Functional, Allocated, Product, and Operational Baselines for NAS products, regardless of the location(s) where the change is implemented. |
| National Stock Numbers (NSN) | An NSN is assigned by the Defense Logistics Agency. NSNs provide a cross-reference to the manufacturer’s part number. NSNs are identified through the provisioning and cataloging process and used by the FAA Depot and field technicians for ordering the provisioned items. |

| Term | Definition |
|---|--|
| NCP Evaluator | A SME or stakeholder evaluating a proposed change to a product or facility within their scope of expertise or the discipline of their Service Unit or Staff office. NCP Evaluators must perform evaluations within the scope of the proposed change. |
| Office of Primary Interest (OPI) | An office directly affected by an FAA Order or with significant interest in a product, activity, or documentation, including item types (e.g., hardware, software, and documentation) |
| Office of Primary Responsibility (OPR) | An office with responsibility for an FAA Order, product, or documentation with delegated authority to develop, verify, and release (e.g., order, MTHB, and TI) |
| Operation and Maintenance (O&M) Organization(s) | The O&M(s) have overall responsibility, including the CM of the product at the end of the Acquirer/Supplier relationship. O&M organizations include logistics, second-level engineering, In-Service manager, data consumers, interfacing products, etc. |
| Operational Baseline | The Operational Baseline is comprised of the approved product definition information and POI. The Operational Baseline is the approved technical documentation representing the installed operational product. This represents a Product Baseline adapted to local conditions. Operational Baselines comprise the technical documentation that initially describes a delivered product. They also include changes to that delivered product that occur as a result of in-service modifications/improvements or as a result of the addition of FAA-developed documentation/tools. The Operational Baseline includes the Product Baseline and any subsequent changes to it. The Operational Baseline is established prior to or directly after ISD and JAI for the selected Key Site(s). |
| Organizational CM Coordinator | An Organizational CM Coordinator is a POC who establishes and maintains an organization's CM profile, identifying those within the organization who are performing the lifecycle CM activities, and coordinates reviews assigned to their organization within the official CM information system. The Organizational CM Coordinator role is assigned at the organizational level. |
| Organization Supervisor | Must review and approve or reject the submitted Case Files to ensure the Case Files meet the organization's goals and objectives for the product. A supervisor's approval is required prior to initiating prescreening or NCP evaluation. |
| Originator | An FAA employee or contractor who submits a Case File to establish a baseline or to propose a change to an established baseline for a product or facility in the NAS, including the associated configuration information. |

| Term | Definition |
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| Part Number | A part number is used to identify a particular part design used in a particular industry. They appear in the technical documentation (manuals) used to maintain the system. Part numbers assigned to LRUs form the foundation for change documentation and tracking, sparing, and provisioning |
| Peer Reviewer | A Peer Reviewer is an internal/organizational peer with subject matter expertise that is assigned by the Originator to assess the completeness and maturity of the proposed change prior to Supervisor review/approval. |
| Physical Configuration Audit (PCA) | Formal examination of the "as-built" configuration of a configuration item against its technical documentation to establish or verify the Product Baseline. The physical configuration audit is complete when the service team or program office corrects any discrepancies resulting from the audit. Defined in AMS Policy. |
| Pre-Screen Reviewer | A Prescreen Reviewer is an Office of Primary Interest for the proposed change to further mature the Case File in preparation for NCP Evaluation. Organizations identify themselves as Prescreening Organizations within the CM information system. Prescreen reviews are assigned by the CCB during the Case File Origination and Prescreening phase of the NCP process. |
| Product | A collection of hardware, software, firmware, assembly, component, item, material, part, or service. |
| Product Baseline | The Product Baseline is the configuration of the system or product being delivered to the customer. It consists of the combined performance/design documentation used in Configuration Identification PAT and test requirements. This documentation package [PDI] incorporates the cumulative baseline documents describing a CI's functional, performance, interoperability, and interface requirements down to the lowest level intended for replacement and the verifications required to confirm the achievement of those specified requirements. The Acquirer must coordinate with the Baseline Manager and O&M organization for configuration changes proposed by the Supplier. The Acquirer must establish the Product Baseline after FCA/PCA. |
| Product Configuration Information (PCI) | Information about a product consisting of PDI and POI. |
| Product Definition Information (PDI) | Information that defines a product's requirements, documents the product attributes, including the process information, and is the authoritative source for the CM of the product. |

| Term | Definition |
|---------------------------------------|--|
| Product Operational Information (POI) | Information developed from PDI used to test, operate, maintain, and dispose of a product |
| Product Portfolio | A collection of products managed by an organization. |
| Production Acceptance Testing (PAT) | Verification of production line units of developed hardware prior to installation at field sites to address B-level and some A-level specification items. Defined in T&E Handbook. |
| Production Readiness Review (PRR) | This review determines if production engineering problems have been resolved, adequate planning accomplished, and the design is ready for production. A PRR evaluated the complete production-configured system to determine if it correctly and completely implements all system requirements and that those requirements are traceable to the final production system. Defined in SEM. |
| Program Requirements Document (PRD) | Establishes the operational framework and top-level performance and functional requirements that must be satisfied by the solution to a service need. The document is first prepared in the concept and requirements definition phase of the AMS lifecycle management process and finalized before the final investment decision. Defined in AMS Policy. |
| Provisioning Conference | The process of determining the range and quantity of items, e.g., spares and repair parts, special tools, test equipment, and support equipment, required to support and maintain an item for an initial period of service. |
| Quality Assurance | The systematic monitoring and evaluation of the various aspects of a product, service, or facility to ensure that program outputs satisfy quality requirements. |
| Reports | A summation of CM data elements, based on criterion specified by a user, to satisfy a need for information. (Commonly known as NAS-MD-001, NAS Master Configuration Index Subsystem Baseline Configuration and Documentation Listing.) |
| Requirements | Specify the conditions or capabilities the agency needs or wants. They form the basis for a contract, standard, specification, or other formally imposed document. Defined in AMS Policy. |
| Requirements Traceability | Addresses the relationship between requirements at the highest level (i.e., conceptual) through the lowest level (i.e., physical); it describes the activities associated with decomposing the requirements from the highest to the lowest level and documenting them so that a full impact analysis (upward and downward) can be performed when changes are proposed |

| Term | Definition |
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| Resiliency | <p>A resilient NAS is one that effectively prepares for and adapts to changing conditions and withstands and recovers from deliberate attacks, accidents, and naturally occurring threats or incidents. The NAS Resiliency Program's critical objectives are to identify and disrupt threats to NAS infrastructure, reduce vulnerabilities, minimize consequences, and hasten response and recovery from events that impact NAS services. As such, key principles for building resiliency into the NAS include redundancy, diversity, separation, transparency, response, and recovery.</p> <p>Resiliency supplements a system's reliability and availability with the capability to prevent and limit the impact of and recover from High Impact events. Resiliency includes a standardized lifecycle management approach for all programs on new and existing systems and facilities to diversify service capabilities. Programs shall incorporate sound resiliency concepts into existing directives.</p> |
| Safety Management System | A mandatory risk management process that program offices use throughout the AMS lifecycle to assess, define, and manage safety risks in the NAS. Defined in AMS Policy. |
| Safety Risk Management | Assessment of safety risk to the NAS, including documentation of changes and defining strategies for monitoring the safety risk associated with changes to or replacement of existing NAS products. Defined in AMS Policy. |
| Serial Numbers | Serial numbers are unique to each item that comes off an assembly line. It is a unique identifier of a particular instance of a part design. Equipment serial numbers support logistics and are assigned when traceability of a unit or part is required. All equipment serial numbers for an assembly are included in the product configuration information. The CMP should describe the methodology and format for equipment serial numbers. |
| Service | <p>A product for which the Supplier retains ownership and responsibility for the CM of the capital asset throughout its lifecycle. The Supplier (or service provider) maintains approval authority and configuration control of the capital asset.</p> <p>Service CI type may apply at the product level or to a product's component services. The Acquirer/Baseline Manager maintains CM authority for enterprise-level requirements (e.g., requirements, interfaces, availability, and reliability) throughout the Acquirer/Supplier relationship. CM authority of the capital asset is not transferred to the Acquirer at the conclusion of the Acquirer/Supplier relationship.</p> |

| Term | Definition |
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| Service Area Manager | Support the execution of facility configuration audits of NAS facilities as prescribed in FAA-STD-058, Standard Practice, Facility Configuration Management, and FAA-STD-059, Standard Practice, NAS Terminal Facility Master Plan Guidelines for Existing Terminal Facilities. |
| Service Change Proposal (SCP) | The documentation by which a proposed service change is described, justified, and submitted to (a) the current document change authority for approval or disapproval of the service change in the documentation and (b) to the procuring activity for approval or disapproval of implementing the service change. SCPs are initiated by the Supplier and approved by the Acquirer in consultation with the Baseline Manager of impacted products. |
| Service Provider | A type of Supplier providing a service to the NAS. |
| Shortfall Analysis | Establishes the foundation for understanding a service shortfall or new opportunity for improving service delivery, as well as the impact on the users and customers of FAA services. The shortfall analysis is the basis for approving a service need or operational capability for inclusion in the FAA enterprise architecture and its roadmaps. |
| Software | A collection of data or computer instructions packaged as a version that tells the computer how to work; i.e., computer programs and computer databases. |
| Solution Provider | The organization (e.g., service organization, program office, or regional office implementing a construction program) responsible for an assigned investment program and for providing the products or services needed to satisfy agency requirements. Defined in AMS Policy. |
| Specification | Refers to a set of documented requirements that a product or service must satisfy. A requirement specification is a document requirement or set of requirements to be satisfied by a given material, design, product, or service. A functional specification defines the functions a solution must provide. A design or product specification describes the features of either a designed solution or final produced solution. Defined in AMS Policy. |
| Stakeholder | As used within AMS, it refers to any user or organization within and outside the FAA having a vested interest in the products and services of an investment program. See OPI |
| Subassembly | Two or more parts that form a portion of an assembly; replaceable as a whole, but having parts that are individually replaceable |

| Term | Definition |
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| Subsystem | Group of related components that are part of a larger system. A subsystem may be the 2nd level of the product hierarchy that is a combination of assemblies, which perform an operational function within the product. A product may be broken down into component subsystems that operate independently and jointly and may operate from different locations to achieve the product's purpose. |
| Supplier | A Supplier can be external or internal to the agency. A Supplier satisfies an approved requirement specified by the Acquirer. This is also known as the solution provider. |
| Sustainment | Consists of those activities associated with keeping fielded products operational and maintained. Sustainment also applies to the planning, programming, and budgeting for support of fielded products referred to as sustainment funding. Defined in AMS Policy. |
| System | A system is a combination of interacting elements organized to achieve one or more stated purposes. A system is an integrated set of constituent pieces combined to accomplish a defined objective. This is the 1 st level of the product hierarchy or the end item. |
| Systems Requirement Review (SRR) | Determines whether the System Requirements Document (Type A Specification) correctly and completely represents the operational and constraint requirements defined in the fPRD. This review also determines if the proposed functional architecture is consistent with the system requirements. The SRR occurs early in the development process before the expenditure of any extensive design definition effort. Defined in SEM. |
| Test and Evaluation Master Plan (TEMP) | Describes the strategy and the scope of the test program and is the primary test management document for investment programs. The TEMP describes planning and preparation activities for the test program, the testing to be accomplished, organizational responsibilities, and how program offices will report test results. It also documents the methodologies that will evaluate the effectiveness and suitability of systems, services, and operational capabilities against program and operational requirements. The testing described in the TEMP also supports investment and program decisions. Defined in AMS Policy. |
| Test Scope | Test scope must be used to evaluate and verify a new configuration or change to a baseline configuration. A justification must be provided when test activities are required in an operational environment (e.g., not in a laboratory environment). |
| Validation | The confirmation that a product or service meets the needs of the Acquirer/Baseline Manager or other identified stakeholders. |

| Term | Definition |
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| Variance | <p>A departure from approved PCI, for a limited amount of time or for a specified effectivity, that does not require revision of approved PCI.</p> <p>A departure from the approved product configuration information (e.g., requirements) that does not require revision of the approved product configuration documentation (e.g., manuals or reference material). A variance may also be known as a waiver or a deviation.</p> |
| Verification | <p>Confirmation by test, analysis, demonstration, simulation, or inspection that a specified requirement has been fulfilled by the product.</p> |
| Waiver | <p>See Variance; normally represents a departure from a technical requirement.</p> |

Appendix D. Administrative Information

- 1. Distribution.** This order will be distributed electronically.
- 2. Authority to Change This Order.** NAS Operations Policy Team, AJW-183 has the sole responsibility to modify, update, or revise this order.
- 3. Suggestions for Improvement.** If you find deficiencies, need clarification, or want to suggest improvements to this order, complete and send FAA Form 1320-19, [Directive Feedback Information](#) to AJW-183, NAS Operations Policy Team, at 9-FAA-NAS-OPs-CM-Policy@faa.gov.

Appendix E. Configuration Management Standard Operating Procedures

(Note: The CM Standard Operating Procedures (SOPs) are currently under development and will be compiled in a Configuration Management Manual. Upon completion, the Configuration Management Manual will be available via TechNet, and this page will be revised with the direct URL to the document.)

Technical Operations maintains SOPs electronically on the FAA Intranet at:
<https://technet.faa.gov/>

The published appendix on the web is official.