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# **Functional Description Document**

# **Standard Financial Information Structure (SFIS) Standard Line of Accounting (SLOA) Validation Service**

# **GEX SLOA Version 1.2.4**

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Prepared for: Office of the Under Secretary of Defense (Comptroller)

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# **Revision History**

Document Revision Number	Description of Change	Change Effective Date	Change Entered By
1.0	First published release	2016 09 26	Northrop Grumman
1.1 draft	Updated to contain business rules and functionality for SLOA v1.1; draft distributed for review	2017 06 15	Northrop Grumman
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1.1 rev. c	Added "no value" to definition of "blank"	2018 01 24	Northrop Grumman
1.2	Include new business rule sets for Trial Balance and Pay Collect systems, non-SLOA transaction processing, and updates to SLOA element descriptions; Updated Appendix B to show interfaces, rules sets by transaction type	2018 09 13	Northrop Grumman
1.2.1	Updated Appendix A and B with Validation Rules and Rule Sets; updated entire document to reflect the requirements, current references and guidelines for MAF and SAHI Validations.	2018 12 18	Northrop Grumman
1.2.1	Updated references to reflect SFIS Matrix 11, SFIS and OSD website references and SAHI Validations based on additional OSD requirement updates. Updated Section 3.2.2.3 and Table A5 requirements and validations.	2019 01 11	Northrop Grumman
1.2.1	Updated Acronyms Section. Updated table formats to include Status and Release columns for Validations.	2019 01 31	Northrop Grumman
1.2.1	Updated Section 3.2.2.3, Table A5, and Appendix B from final review with SME.	2019-02-07	Northrop Grumman
1.2.2	Updated to reflect change from Office of Undersecretary of Defense Comptroller (OUSD(C)) Business Integration Office (BIO) to OUSD(C) Business Processes and Systems Modernization (BPSM)	2019-09-14	Northrop Grumman
1.2.3	Changed Northrop Grumman to Peraton. Updated BPSM to Focus Leadership Execution to Focus Leadership Execution (FLEX). Updated SFIS/SLOA Validation References. Updated to add the ASAP/ASAP VAL transaction type and business rule to Appendix B. This new interface mirrors the business rules for the PAM SPR transaction type.	2021-05-06	Peraton
1.2.4	updated Appendix A and B with Validation Rules and Rule Sets; updated entire document to reflect the requirements, current references and guidelines for MAF and SAHI Validations.	12/23/2022	Peraton

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## 1.0 Overview

The Standard Financial Information Structure (SFIS) Standard Line of Accounting (SLOA) Validation Service is a Global Exchange (GEX) Services-offered service comprised of the following functional areas: SLOA Lookup Data Upload, SLOA Lookup Data, SLOA Validation Component, SLOA Business Rules Portal, and SLOA Reporting Data Mart. Source and target systems that exchange data files containing SLOA lines call the SLOA Validation Component, either as part of an existing GEX map or a new GEX map. This enables Department of Defense (DoD) systems to continue their exchange of information as phased implementations of SLOA compliance occurs and further mitigates the impact to the business transactional data flows between target and legacy business partner systems. Results of the SLOA Validation Component are passed back to the requesting GEX map to be included as part of the map's Acknowledged/Not Acknowledged (ACK/NAK) response to the originating system, as well as fed to the SLOA Reporting Data Mart for monthly metrics reporting. Figure 1 shows a simplified picture of the data flow required to enable partner systems utilization of the SLOA Validation Service via GEX data exchange handling.



Figure 1. SLOA Validation Service Flow Overview

For transactions received from partner systems containing SLOA lines, GEX applies specific controls to validate the SLOA data values provided. GEX applies these SLOA validation controls on both data translation and validation integrations. In both cases, the GEX data exchange map extracts the SLOA elements and calls the SLOA Validation Component. The SLOA Validation Component in turn validates the SLOA elements and returns a list of validation errors if any are found to the calling GEX Data Integration Map. In addition, the SLOA Validation Service logs the validation errors into the SLOA Reporting Data Mart for extract by the GEX report process. Monthly reports containing SLOA validation result metrics are sent to the Office of the Under Secretary of Defense (Comptroller) (OUSD(C)) Focus Leadership Execution (FLEX) for analysis.

The addition of new business rules or changes to existing business rules are made via the SLOA Business Rules User Interface Development Tool, and once tested and accepted, the rules are incorporated in the SLOA Validation Component and delivered as part of a monthly GEX build release. The SLOA Validation Component performs validations using values retrieved from a daily extract of the *SFIS Values Library* and Master Appropriation File from the *SFIS Values Library* is handled by the SLOA Lookup Data Upload and SLOA Lookup Data components.

### 1.1 Background

SLOA data standards were defined in the SLOA Accounting Classification Memo (Sep 14, 2012). The SLOA data structures and assessment business rules for SLOA data were defined in the SFIS Matrix 11.2 (05 Feb 2021). Authoritative SFIS values are found in the SFIS Values Library and in the Master Appropriation File (MAF), both part of the SFIS Values Library Service as published on the Office of the Undersecretary of Defense (Comptroller)(OUSC)/Deputy Chief Financial Officer (DCFO) SFIS Website - https://comptroller.defense.gov/ODCFO/sfis.aspx (2018). The validation rules discussed in this document draw heavily from these documents.

The SLOA Validation Service utilizes a portion of the software developed in support of the SLOA Centralized Service (SCS) Proof of Concept (POC). The SLOA Validation Component, which is contained within the SLOA Validation Service module, is intended to be accessible only by GEX data exchange maps and called directly within the map rather than invoked as an external web service call. This results in a tightly coupled integration between GEX and the SLOA Validation Service. The SLOA business rules developed for the SCS POC were reused and modified to incorporate additional validations of the Master Appropriation File elements (including the TAFS to B12 table) and the SFIS Matrix.

## 2.0 Sources

SFIS is a comprehensive data structure that supports requirements for budgeting, financial accounting, cost/performance, and external reporting needs across the DoD enterprise. SFIS standardizes financial reporting across DoD and allows revenues and expenses to be reported by programs that align with major goals, rather than basing reporting primarily on appropriation categories. It also enables decision-makers to efficiently compare programs and their associated activities and costs across the department and provides a basis for common valuation of DoD programs, assets, and liabilities.

Detailed information about the SFIS can be found at the *OUSD(C)/DCFO SFIS website found at* <u>https://comptroller.defense.gov/ODCFO/sfis.aspx</u>.

### 2.1 Related Documentation

#### **DoD documentation:**

SLOA Accounting Classification Memo (Sep 14, 2012). <u>Memorandum for Secretaries of</u> the Military Departments et al.: Department of Defense Standard Line of <u>Accounting/Accounting Classification</u>. Publication date Sept 14 2012. Available at URL <u>https://comptroller.defense.gov/Portals/45/Documents/ODCFO/SFIS/SLoA\_Accounting</u> <u>Class\_Memo.pdf</u>.

#### Software documentation:

System Design Document – SFIS, SLOA, VCL SDD v1.0 Interface Deployment Guide – Interfaces for Data Exchange for SLOA Validation Service – GEX.SLOA.1.0.4.IDG

#### SFIS/SLOA Validation references:

*SFIS Matrix 11.2 Matrix (2021 02 05).* BEA 11.2 Standard Financial Information Structure. Available at URL <u>https://comptroller.defense.gov/Portals/45/Documents/ODCFO/SFIS/SFIS\_11\_2\_Matrix.</u> xlsx. Last-modification date 05 Feb 2021. Accessed 2021 05 14

*SFIS Values Library*. *SFIS Values Library* Service, SFIS Code Value Listing. Publication date not known. Available to those in .MIL domains at URL <u>https://beis.csd.disa.mil/sfislib/sf\_lib\_combo.xml</u>. All others should see the *OUSC/DCFO* webpage at <u>https://comptroller.defense.gov/ODCFO/sfis/SFISValuesLibraryService/</u> for access information. *OUSC/DCFO* webpage accessed 2021 05 14.

*MAF*. <u>SFIS Values Library Service, Master Appropriation File</u>. Publication date not known. Available to those in .MIL domains at URLhttps://beis.csd.disa.mil/sfislib/masterAppropriationFile.html. All others should see

the *OUSC/DCFO* webpage at https://comptroller.defense.gov/ODCFO/sfis/SFISValuesLibraryService/ for access

information. *OUSC/DCFO* webpage accessed 2021 05 14.

*OUSD(C)/DCFO SFIS Website (2018).* Available at URL <u>https://comptroller.defense.gov/ODCFO/sfis.aspx</u>. Accessed 2021 05 14.

### 3.0 Requirements

#### 3.1 Top-Level Requirements Summary

The SLOA Validation Service draws upon several sources for validation of SLOA elements. The SLOA Validation Service connects daily to the SFIS Library Service and extracts data values contained within the *SFIS Values Library* and *MAF*. These data values are verified for content and populated into a local data store. The local data store is used to validate SLOA elements extracted from data transactions. Additionally, syntax and relations among SLOA elements as specified in *SFIS Matrix 11.0 Matrix (01 Oct 2018)* are used for validation of SLOA elements. Presently only those SFIS business rules that reference SLOA elements are executed by the

SLOA Validation Service. The results of these validations are transmitted back to the calling GEX map and reported back to the partner system via the existing GEX map acknowledgement model. In addition to reporting the validation results through the calling GEX map to the partner system, validation results are reported to OUSD(C) FLEX by Peraton via monthly reports.

### 3.2 Detailed Functional Requirements

#### 3.2.1 SLOA Reference Data Management (RDM)

#### 3.2.1.1 SFIS Values Library Data

Certain acceptable values for SLOA elements are drawn from the *SFIS Values Library*. This section describes how the SLOA Validation Service obtains and maintains currency of values from that library.

The SLOA Validation Service **shall** provide a mechanism to retrieve *SFIS Values Library* data from the Government authoritative data source on a daily basis. [*RDM-001*]

The SLOA Validation Service **shall** record the date of the last successful processing of the *SFIS Values Library* data into the GEX SLOA Validation Component. [*RDM-002*]

The SLOA Validation Service **shall** provide a mechanism to monitor communications status between GEX and DCD/DCW servers for transmission of the *SFIS Values Library* data files. [*RDM-017*]

The SLOA Validation Service **shall** notify the GEX administrator when communications between GEX and DCD/DCW servers are found to have been interrupted for the *SFIS Values Library* data files. [*RDM-018*]

The SLOA Validation Service **shall** provide a mechanism to compare the date of the *SFIS Values Library* data from the Government authoritative data against the date of the last successful processing of the *SFIS Values Library* data into the GEX SLOA Validation Component. [*RDM-003*]

If the date of the last successful processing of the *SFIS Values Library* data into the GEX SLOA Validation Component is more recent than the date on the *SFIS Values Library* data stored in the Government authoritative source, the SLOA Validation Service **shall** discard the file without processing into the GEX SLOA Validation Component. [*RDM-004*]

Upon receipt of *SFIS Values Library* data, the SLOA Validation Library **shall** validate the structure of the received data file against the schema supplied by the Government authoritative data source. **[***RDM-005*]

If the received *SFIS Values Library* data file is not compliant with the Government-supplied schema, the SLOA Validation Service **shall** discard the received data file without further processing. [*RDM-006*]

If the received *SFIS Values Library* data file is not compliant with the Government-supplied schema, the SLOA Validation Service **shall** notify the GEX administrator that processing of the data file could not be completed. [*RDM-007*]

The SLOA Validation Service **shall** provide a mechanism to evaluate the completeness of *SFIS Values Library* data files received from the Government authoritative data source. [*RDM-019*]

The SLOA Validation Service **shall** notify the GEX administrator when incomplete *SFIS Values Library* data files are received from the Government authoritative data source. [*RDM-020*]

If the received *SFIS Values Library* data file is compliant with the Government-supplied schema, the SLOA Validation Service **shall** process the file and update the corresponding local files within the GEX SLOA Validation Component. [*RDM-008*]

The SLOA Validation Service **shall** update local copies of the *SFIS Values Library* data files if and only if the *SFIS Values Library* data files received from the Government authoritative data source have been evaluated as complete. [*RDM-021*]

#### 3.2.1.2 SFIS Values Library Master Appropriation File

Certain acceptable values for SLOA elements are drawn from the *MAF*. This section describes how the SLOA Validation Service obtains and maintains currency of values from the *MAF*.

The SLOA Validation Service **shall** provide a mechanism to retrieve the *SFIS Values Library Master Appropriation File* from the Government authoritative data source on a daily basis. **[RDM-009]** 

The SLOA Validation Service **shall** record the date of the last successful processing of the *SFIS Values Library Master Appropriation File* into the GEX SLOA Validation Component. [*RDM010*]

The SLOA Validation Service **shall** provide a mechanism to monitor communications status between GEX and DCD/DCW servers for transmission of the *SFIS Values Library Master Appropriation File*. **[RDM-022]** 

The SLOA Validation Service **shall** notify the GEX administrator when communications between GEX and DCD/DCW servers are found to have been interrupted for the *SFIS Values Library* data files. [*RDM-023*]

The SLOA Validation Service **shall** provide a mechanism to compare the date of the *SFIS Values Library Master Appropriation File* from the Government authoritative data against the date of the last successful processing of the *SFIS Values Library Master Appropriation File* into the GEX SLOA Validation Component. [*RDM-011*]

If the date of the last successful processing of the *SFIS Values Library Master Appropriation File* into the GEX SLOA Validation Component is more recent than the date on the *SFIS Values Library Master Appropriation File* stored in the Government authoritative source, the SLOA Validation Service **shall** discard the file without processing into the GEX SLOA Validation Component. [*RDM-012*]

Upon receipt of the SFIS Values Library Master Appropriation File, the SLOA Validation

Library **shall** validate the structure of the received data file against the schema supplied by the Government authoritative data source. [*RDM-013*]

If the received *SFIS Values Library Master Appropriation File* is not compliant with the Government-supplied schema, the SLOA Validation Service **shall** discard the received data file without further processing. [*RDM-014*]

If the received *SFIS Values Library Master Appropriation File* is not compliant with the Government-supplied schema, the SLOA Validation Service **shall** notify the GEX administrator that processing of the data file could not be completed. [*RDM-015*]

The SLOA Validation Service **shall** provide a mechanism to evaluate the completeness of the *SFIS Values Library Master Appropriation File* received from the Government authoritative data source. **[RDM-024]** 

The SLOA Validation Service **shall** notify the GEX administrator when an incomplete *SFIS Values Library Master Appropriation File* is received from the Government authoritative data source. [*RDM-025*]

If the received *SFIS Values Library Master Appropriation File* is compliant with the Government-supplied schema, the SLOA Validation Service **shall** process the file and update the corresponding local files within the GEX SLOA Validation Component. [*RDM-016*]

The SLOA Validation Service **shall** update local copies of the *SFIS Values Library Master Appropriation File* if and only if the *SFIS Values Library Master Appropriation File* received from the Government authoritative data source has been evaluated as complete. **[RDM-026]** 

#### 3.2.1.3 SFIS Matrix File

The SFIS, Version 11.0, commonly called the *SFIS Matrix*, is the third primary source for SLOA validation parameters. The *SFIS* Matrix contains descriptions of approximately 70 attributes encompassing hundreds of business rules, some of which are appropriate for use in validating SLOA data. Attributes have names (e.g., "Department Regular Code") and keys (e.g., "A1") in the *SFIS* Matrix, while the associated business rules have numbers called BRs (e.g., "BR # 185550"). Descriptions of requirements involving *SFIS* Matrix business rules are listed below.

The *SFIS* Matrix is updated infrequently. As needed, updates to the *SFIS* Matrix will be incorporated into future versions of this document.

Appendix A in this document contains a trace back matrix that maps the SLOA Data Validation requirements to *SFIS Matrix 11.2 (05 Feb 2021)* business rules.

#### 3.2.2 SLOA Data Validation

The SLOA Validation Service validation rules currently address three types of categories: Syntax Validations, Allowable Value Validations, and Relational Validations, as specified in the *SFIS Matrix 11.2 (05 Feb 2021)*, the *SFIS Values Library*, and the *MAF*. In this set of requirements, attribute names are mentioned and are followed by the associated *SFIS* Matrix key in parentheses, e.g., "Department Regular Code (A1)."

As mentioned above, these requirements are mapped to business rules from the *SFIS* Matrix, where such a mapping exists, in Appendix A.

NOTICE: Values defined to be "alphanumeric" in the *SFIS Matrix 11.2 (05 Feb 2021)* have been implemented as strings. This follows established customer practices for such data elements. This FDD document retains the notation in the *SFIS Matrix 11.2 (05 Feb 2021)*.

#### 3.2.2.1 Syntax Validations

Syntax validations are concerned with allowable lengths and character sets for SLOA elements. A brief table showing the various character subsets appears in Appendix A, while a complete ASCII character table showing all characters used in SLOA elements is presented in Appendix D.

The SLOA Validation Service **shall** validate that the Department Regular Code (A1) value is exactly three (3) numeric characters in length, if the value is present. **[VAL-027]** 

The SLOA Validation Service **shall** validate that the Department Transfer Code (A2) value is exactly three (3) numeric characters in length, if the value is present. **[VAL-028]** 

The SLOA Validation Service **shall** validate that the Main Account Code (A3) value is exactly four (4) numeric characters in length, if the value is present. **[VAL-029]** 

The SLOA Validation Service **shall** validate that the Sub-Account Code (A4) value is exactly three (3) numeric characters in length, if the value is present. **[VAL-030]** 

The SLOA Validation Service **shall** validate that the Sub Class Code (A7) value is exactly two (2) numeric characters in length, if the value is present. **[VAL-031]** 

The SLOA Validation Service **shall** validate that the Reimbursable Flag Indicator (A9) value is exactly one (1) alphabetic character in length, if the value is present. **[VAL-001]** 

The SLOA Validation Service **shall** validate that the Period of Availability Beginning (POAB) / Program Year (A27) value is four (4) numeric characters (format of CCYY) in length, if the value is present. **[VAL-032]** 

The SLOA Validation Service **shall** validate that the Period of Availability Ending (POAE) (A28) value is four (4) numeric characters (format of CCYY) in length, if the value is present. [*VAL-033*]

The SLOA Validation Service **shall** validate that the Availability Type Code (A29) value is exactly one (1) alphabetic character in length, if the value is present. **[VAL-002]** 

The SLOA Validation Service **shall** validate that the Budget Line Item Identifier (BLII) (B4) value is not more than 16 alphanumeric characters in length, if the value is present. **[VAL-026]** 

The SLOA Validation Service **shall** validate that the Object Class Code (B6) value is not fewer than three (3) string characters and not more than six (6) string characters in length, if the value is present. [*VAL-034*]

The SLOA Validation Service **shall** validate that the Sub-Allocation Holder Identifier (SAHI) (B12) value is exactly four (4) alphanumeric characters in length, if the value is present. [*VAL003*]

The SLOA Validation Service **shall** validate that the Agency Disbursing Identifier Code (O2) value is not more than eight (8) numeric characters in length, if the value is present. **[VAL-035]** 

The SLOA Validation Service **shall** validate that the Agency Accounting Identifier Code (AAIC) (O3) value is exactly six (6) numeric characters in length, if the value is present. **[VAL-036]** 

The SLOA Validation Service **shall** validate that the Business Event Type Code (BETC) (T20) value is not more than eight (8) alphabetic characters in length, if the value is present. **[VAL-037]** 

The SLOA Validation Service **shall** validate that the Security Cooperation Customer Code (T21) value is not fewer than two (2) alphanumeric characters and not more than three (3) alphanumeric characters in length, if the value is present. [*VAL-038*]

The SLOA Validation Service **shall** validate that the Security Cooperation Case Designator (T22) value is not fewer than three (3) alphanumeric characters and not more than four (4) alphanumeric characters in length, if the value is present. [*VAL-039*]

The SLOA Validation Service **shall** validate that the Security Cooperation Case Line Item Identifier (T23) value is exactly three (3) alphanumeric characters in length, if the value is present. [*VAL-040*]

The SLOA Validation Service **shall** validate that the Security Cooperation Implementing Agency Code (T27) value is exactly one (1) alphabetic character in length, if the value is present. [*VAL-041*]

The SLOA Validation Service **shall** validate that the Funding Center Identifier (CA1) value is not more than 16 alphanumeric characters in length, if the value is present. [*VAL-042*]

The SLOA Validation Service **shall** validate that the Cost Center Identifier (CA3) value is not more than 16 alphanumeric characters in length, if the value is present. [*VAL-043*]

The SLOA Validation Service **shall** validate that the Project Identifier (CA4) value is not more than 25 alphanumeric characters in length, if the value is present. **[VAL-044]** 

The SLOA Validation Service **shall** validate that the Activity Identifier (CA5) value is not more than 16 alphanumeric characters in length, if the value is present. **[VAL-045]** 

The SLOA Validation Service **shall** validate that the Cost Element Code (CA6) value is not more than 16 alphanumeric characters in length, if the value is present. **[VAL-046]** 

The SLOA Validation Service **shall** validate that the Work Order Number (CA7) value is not more than 16 alphanumeric characters in length, if the value is present [*VAL-061*]

The SLOA Validation Service **shall** validate that the Functional Area Identifier (CA15) value is not more than 16 alphanumeric characters in length, if the value is present. **[VAL-047]** 

#### 3.2.2.2 Allowable Value Validations

Validations for allowable values compare SLOA element values contained in incoming SLOA lines against lists of values considered valid for the transaction type being sent. The allowable values are comprised of a finite list of SLOA elements that are applied to specific MAF validations rules as shown in Table A4 below. Rules are customized based on the transaction type; if the transaction type is not provided or defined; the validation will default to all MAF elements provided in the incoming SLOA lines; with the exception of those transactions that have Availability Type Code of 'X'. Lists of allowable values are taken from the *SLOA Values Library, MAF*, and *SFIS Matrix 11.2 (05 Feb 2021)*.

The SLOA Validation Service **shall** validate the Department Regular Code (A1) value against the list of valid Department Regular Code values from the *SFIS Values Library*, if the value is present. [*VAL-004*]

The SLOA Validation Service **shall** validate the Department Transfer Code (A2) value against the list of valid Department Transfer Code values from the *SFIS Values Library Master Appropriation File*, if the value is present. **[VAL-048]** 

The SLOA Validation Service **shall** validate the Main Account Code (A3) value against the list of valid Main Account Code values from the *SFIS Values Library Master Appropriation File*, if the value is present. [*VAL-049*]

The SLOA Validation Service **shall** validate the Sub-Account Code (A4) value against the list of valid Sub-Account Code values from the *SFIS Values Library Master Appropriation File*, if the value is present. **[VAL-050]** 

The SLOA Validation Service **shall** validate the Sub Class Code (A7) value against the list of unique Sub Class Code values from the *SFIS Values Library Master Appropriation File*, if the value is present. [*VAL-005*]

The SLOA Validation Service **shall** validate the Reimbursable Flag (A9) value against the list of valid values, "R" (Reimbursable) or "D" (Direct) as identified in the SFIS Matrix, if the value is present. [*VAL-006*]

The SLOA Validation Service **shall** return an error if the Reimbursable Flag (A9) is not present. [*VAL-007*]

The SLOA Validation Service **shall** validate the Availability Type (A29) value against the list of valid values "C" (Canceled TAS), "F" (Clearing/Suspense TAS), "X" (No-year TAS), or Blank (Multi-year or Annual TAS, unavailable receipt TAS) as identified in the *SFIS* Matrix, if the value is present. [*VAL-008*]

The SLOA Validation Service **shall** validate the Object Class (B6) value against the list of valid Object Class values from the *SFIS Values Library*, if the value is present. [*VAL-009*]

The SLOA Validation Service **shall** validate the Agency Disbursing Identifier (O2) value against the list of valid Agency Disbursing Identifier values from the *SFIS Values Library*, if the value is present. [*VAL-010*]

The SLOA Validation Service **shall** validate the Agency Accounting Identifier (O3) value against the list of valid Agency Accounting Identifier values from the *SFIS Values Library*, if the value is present. [*VAL-011*]

The SLOA Validation Service **shall** validate the Business Event Type Code (BETC) (T20) value against the list of valid BETC values from the *SFIS Values Library*, if the value is present. [*VAL-012*]

The SLOA Validation Service **shall** validate the Security Cooperation Customer Code (T21) value against the list of valid Security Customer Code values from the *SFIS Values Library*, if the value is present. [*VAL-013*]

The SLOA Validation Service **shall** validate the Security Cooperation Implementing Agency Code (T27) value against the list of valid Security Implementing Agency values from the *SFIS Values Library*, if the value is present. [*VAL-014*]

#### 3.2.2.3 Relational Validations

Validations of relationships among SLOA elements are based upon business rules presented in the SFIS Matrix 11.2 (05 Feb 2021).

The SLOA Validation Service **shall** validate the combination of SLOA values when an unidentified transaction type is sent for validation exist in a record within the *SFIS Values Library Master Appropriation File (MAF)*. This is a table driven rule and is outlined in Appendix B. The SLOA values in the MAF include: Department Regular Code (A1)

Department Transfer Code (A2) Period of Availability Beginning (A27) Period of Availability Ending (A28) Availability Type Code (A29) Main Account Code (A3) Sub Class Code (A7) Sub Account Code (A4) Business Event Type Code (BETC) (T20)

This is known as the default MAF Validation Rule (As shown in Appendix B). [VAL-015]

The SLOA Validation Service **shall** validate against the MAF table with varying elements based on transaction type. (Transaction Type rule sets are listed in Appendix B.) [*VAL-064*]

The SLOA Validation Service **shall** provide the capability to include Period of Availability Beginning (POAB) (A27) when performing all MAF validations based on transaction type if Availability Type Code (A29) is X (As shown in Appendix B). [VAL-065]

The SLOA Validation Service shall validate that the Sub Allocation Holder Identification (SAHI) (B12) value is blank when the Department Regular Code (A1) or Department Transfer Code (A2) value is '097'. [VAL-016]

The SLOA Validation Service **shall** validate the combination of SAHI and TAS values provided in the transaction record against the TAFS to B12 Table elements. TAS values in the TAFS to B12 table include: *Department Regular Code, Department Transfer Code, Main Account Code, Period of Availability Beginning, Period of Availability Ending, Sub Account Code (A4), Sub Class Code, and Availability Type Code.* The following elements in the TAFS to B12 table, 'Is Valid' and 'Effective Date' are not used in the validation. This is a table-based validation as detailed in Appendix B. [VAL-066]

The SLOA Validation Service **shall** validate if the SAHI (B12) value is blank in the transaction record when the TAFS to B12 table look up validation returns the value of "SAHI" in the SAHI TAFS to B12 Code field. [*VAL-067*]

The SLOA Validation Service **shall** validate that the Funding Center Identifier (CA1) value is populated if at least one of the values Cost Center (CA3), Project Identifier (CA4), Activity Identifier (CA5), Cost Element Code (CA6), Work Order Number (CA7), or Functional Area Identifier (CA15) is populated. **[VAL-017]** 

The SLOA Validation Service **shall** validate that at least one of the values Cost Center (CA3), Project Identifier (CA4), Activity Identifier (CA5), Cost Element Code (CA6), Work Order Number (CA7), and Functional Area Identifier (CA15) is populated if the Funding Center Identifier (CA1) is populated. [*VAL-062*]

The SLOA Validation Service **shall** validate that the Security Cooperation Case Designator (T22), Security Cooperation Case Line Item (T23), and Security Cooperation Implementing Agency Code (T27) values are all present when the Security Cooperation Customer Code (T21) value is present. [*VAL-018*]

The SLOA Validation Service **shall** validate that the Security Cooperation Customer Code (T21), Security Cooperation Case Line Item (T23), and Security Cooperation Implementing Agency Code (T27) values are all present when the Security Cooperation Case Designator (T22) value is present. [*VAL-019*] The SLOA Validation Service **shall** validate that the Security Cooperation Customer Code (T21), Security Cooperation Case Designator (T22), and Security Cooperation Implementing Agency Code (T27) values are all present when the Security Cooperation Case Line Item (T23) value is present. [*VAL-020*]

The SLOA Validation Service **shall** validate that the Security Cooperation Customer Code (T21), Security Cooperation Case Designator (T22), and Security Cooperation Case Line Item (T23) values are all present when the Security Cooperation Implementing Agency Code (T27) value is present. [*VAL-021*]

The SLOA Validation Service **shall** validate that the Budget Line Item Identifier (BLII) (B4) is present when value of Main Account (A3) is within the range 0000-3899. **[VAL-025]** 

If the Availability Type Code (A29) value is blank, then the SLOA Validation Service **shall** validate that the value of the Period of Availability Beginning/Program Year (POAB) (A27) is a four-digit alphanumeric value or is blank. **[VAL-051]** 

If the Availability Type Code (A29) value is blank and the Period of Availability Beginning/Program Year (POAB) (A27) is a four-alphanumeric value, then the SLOA Validation Service **shall** validate that the value of the Period of Availability Ending (POAE) (A28) is also a four-alphanumeric value. This applies to annual/multiyear accounts. [VAL-052]

If the Period of Availability Beginning/Program Year (POAB) (A27) and Period of Availability Ending (POAE) (A28) are both numeric values representing years, then the SLOA Validation Service **shall** validate that the value of the POAE is greater than or equal to the value of POAB. **[VAL-068]** 

If the Availability Type Code (A29) value is blank and the Period of Availability Beginning (POAB) (A27) is blank, then the SLOA Validation Service **shall** validate that the value of the Period of Availability Ending (POAE) (A28) is blank. This applies to: unavailable accounts; unavailable receipt main accounts; miscellaneous receipt main accounts. [*VAL-053*]

If the Availability Type Code (A29) value is uppercase 'C' (ASCII 0x43), then the SLOA Validation Service **shall** validate that the value of the Period of Availability Beginning (POAB) (A27) is blank. This applies to canceled main accounts. **[VAL-054]** 

If the Availability Type Code (A29) value is uppercase 'C' (ASCII 0x43), then the SLOA Validation Service **shall** validate that the value of the Period of Availability Ending (POAE) (A28) is blank. This applies to canceled main accounts. **[VAL-055]** 

If the Availability Type Code (A29) value is uppercase 'F' (ASCII 0x46), then the SLOA Validation Service **shall** validate that the value of the Period of Availability Beginning (POAB) (A27) is blank. This applies to: clearing main accounts; suspense main accounts. [*VAL-056*]

If the Availability Type Code (A29) value is uppercase 'F' (ASCII 0x46), then the SLOA Validation Service **shall** validate that the value of the Period of Availability Ending (POAE) (A28) is blank. This applies to: clearing main accounts; suspense main accounts. [VAL-057]

If the Availability Type Code (A29) value is uppercase 'X' (ASCII 0x58), then the SLOA Validation Service **shall** validate that the value of the Period of Availability Beginning (POAB) (A27) is a four-digit numeric value or is blank. [*VAL-058*]

If the Availability Type Code (A29) value is uppercase 'X' (ASCII 0x58), then the SLOA Validation Service **shall** validate that the value of the Period of Availability Ending (POAE) (A28) is blank. This applies to: No-Year funding; No-Year funding with fiscal accountability. [*VAL-059*]

#### 3.2.2.4 Validation Metadata

The Validation Metadata comprise information about incoming SLOA lines that is used for forensic purposes. These requirements do not map back to the sources cited previously, but were included to support desired functionality.

The SLOA Validation Service **shall** provide the capability to receive the specified SLOA line number associated with the SLOA values passed from the requesting GEX map. [*VAL-022*]

The SLOA Validation Service **shall** provide the capability to receive the identifier of the originating system whose data exchange files contain the validated SLOA lines. [*VAL-023*]

The SLOA Validation Service **shall** provide the capability to receive the specific data exchange file type that contained the SLOA lines, which are validated. [*VAL-024*]

#### 3.2.3 SLOA Metrics Logging

#### 3.2.3.1 SLOA Validation Error Results Logging

If an incoming SLOA data line fails validation, the SLOA Validation Service produces a log entry that identifies the data line and describes the failure.

The SLOA Validation Service **shall** provide the capability to store SLOA validation errors within the SLOA Reporting Data Mart. [*LOG-001*]

The SLOA Reporting Data Mart **shall** store the specified SLOA Record Identifier associated with the SLOA line, passed from the requesting GEX map that failed validation. [*LOG-002*]

The SLOA Reporting Data Mart **shall** store System Identifier of the system whose SLOA line failed validation. [*LOG-003*]

The SLOA Reporting Data Mart **shall** store the Transaction/Event Type of the SLOA line that failed validation. [*LOG-004*]

The SLOA Reporting Data Mart **shall** store the Validation Error Number associated with the specific SLOA validation rule that caused the SLOA line to fail validation. [*LOG-005*]

The SLOA Reporting Data Mart **shall** store the Validation Error Message, identifying the validation rule and the name(s) and value(s) of the element(s) that caused the SLOA line to fail validation. [*LOG-006*]

The SLOA Reporting Data Mart **shall** store the Log Date, i.e., the date and time of the occurrence of each SLOA validation error, to include year, month, day of month, hour, minute, second, and 6 digits of fractional second. [*LOG-007*]

The SLOA Reporting Data Mart **shall** store the Valid SLOA indicator associated with the invalid SLOA line to show that the line had failed validation. [*LOG-008*]

#### 3.2.3.2 SLOA Validation Success Results Logging

If an incoming SLOA data line passes validation, the SLOA Validation Service produces a log entry that identifies the data line and indicates that it was determined to be valid.

The SLOA Validation Service **shall** provide the capability to store SLOA validation successes within the SLOA Reporting Data Mart. [*LOG-009*]

The SLOA Reporting Data Mart **shall** store the specified SLOA Record Identifier associated with the SLOA line, passed from the requesting GEX map that passed validation. [*LOG-010*]

The SLOA Reporting Data Mart **shall** store System Identifier of the system whose SLOA line passed validation. [*LOG-011*]

The SLOA Reporting Data Mart **shall** store the Transaction/Event Type of the SLOA line that passed validation. [*LOG-012*]

The SLOA Reporting Data Mart **shall** store the Validation Status Number associated with successful validation for the SLOA line found to be valid. [*LOG-013*]

The SLOA Reporting Data Mart **shall** store the Validation Status Message associated with successful validation for the SLOA line found to be valid. [*LOG-014*]

The SLOA Reporting Data Mart **shall** store the Log Date, i.e., the date and time of the occurrence of each SLOA validation success, to include year, month, day of month, hour, minute, second, and 6 digits of fractional second. [*LOG-015*]

The SLOA Reporting Data Mart **shall** store the Valid SLOA indicator associated with the valid SLOA line to show that the line had passed validation. [*LOG-016*]

#### 3.2.3.3 Legacy Line of Accounting Logging

The contents of Legacy Lines of Accounting (Legacy LOAs), sometimes called Non-SLOA, are not visible to the SLOA Validation Service. However, because it has become desirable to determine how many Legacy LOAs travel through GEX, and because the processing environment associated with the SLOA Validation Service is a convenient place to perform that count, records are stored supporting the counting of Legacy LOAs within the SLOA Reporting Data Mart. The mechanism only counts such lines, but does not perform validation on Legacy LOAs. It must be emphasized that Legacy LOAs are never exposed to the SLOA Validation Service, so no validation of Legacy LOAs is possible within the Service. GEX processes insert records into the SLOA Reporting Data Mart to support the counting of Legacy LOAs.

The GEX processing system **shall** provide the ability to count Legacy Lines of Accounting (Legacy LOAs) contained in data exchange files that are processed by the GEX system. [*LOG017*]

The GEX input line-identifying mechanism **shall** provide the capability to store log entries for the purpose of counting of Legacy LOAs that transit the GEX system within the SLOA Reporting Data Mart. [*LOG-018*]

The SLOA Reporting Data Mart **shall** store the System Identifier of the system whose data exchange files contained a Legacy LOA line. [*LOG-019*]

The SLOA Reporting Data Mart **shall** store the Transaction/Event Type of the Legacy LOA line that transited the GEX system, if that value is available. [*LOG-020*]

The SLOA Reporting Data Mart **shall** store the Status Number associated with the transit of a Legacy LOA through the GEX system. [*LOG-021*]

The SLOA Reporting Data Mart **shall** store the Status Message associated with the transit of a Legacy LOA through the GEX system. [*LOG-022*]

The SLOA Reporting Data Mart **shall** store the Log Date, i.e., the date and time of the recognition that a Legacy LOA is transiting the GEX system, to include year, month, day of the month, hour, minute, second, and 6 digits of fractional second. [*LOG-023*]

The SLOA Reporting Data Mart **shall** store an indicator under the name-of-convenience "Valid SLOA" to show that the line being reported upon is a Legacy LOA. [*LOG-024*]

#### 3.2.4 SLOA Validation Results and Legacy LOA Reporting

Following the thrust of the previous section, certain SLOA and Legacy LOA metrics are produced and stored in the SLOA Recording Data Mart database that support a better view of the flow of valid SLOA, invalid SLOA, and Legacy LOA through GEX. As part of the effort to provide such a view, the reporting of collected metrics presents all of the metrics in a single format for ease of analysis. These combined reports, formerly called "error reports," are called "status/error/count reports," or simply "status reports."

Given the data that are available about SLOA and Legacy LOA, the status/error/count reports contain information about:

- Invalid SLOA data an indication that a particular SLOA was found to be invalid, along with the reason(s) why it was invalid; if multiple validation errors occur, the validation log reflects an entry for each validation error found in the SLOA record.
- Valid SLOA data an indication that a particular SLOA was found to be valid.
- Legacy LOA count records since the SLOA Validation Service has no visibility into Legacy LOAs, there is no ability to evaluate the validity of such lines. The lines are counted, however, given that other non-SLOA GEX applications enter appropriate records about them in the SLOA Reporting Data Mart.

The SLOA Validation Service **shall** generate status/error/count reports in a Comma Separated Value (CSV) format. [*RPT-001*]

The SLOA Validation Service **shall** provide the capability to configure status/error/count reports to run at a specific time of day using defined report parameters. [*RPT-002*]

The SLOA Validation Service **shall** provide the capability to do an hourly adjustment on validated status/error/count reports to accommodate for Daylight Savings Time. [*RPT-003*]

The SLOA Validation Service **shall** provide the capability to configure the frequency of status/error/count reports (Daily, Weekly, and Monthly). **[***RPT-004***]** 

The SLOA Validation Service **shall** provide the capability to send status/error/count reports to OUSD(C) Focus Leadership Execution (FLEX). (Note: Per OUSD(C) FLEX's direction on 13 June 2018, the daily status report will continue to be sent to OUSD(C) FLEX; the weekly and monthly reports are no longer required from the SVS. [*RPT-005*]

The SLOA Validation Service **shall** provide the capability to regenerate and resend status/error/count reports. [*RPT-006*]

The SLOA Validation Service **shall** provide the capability to activate and deactivate status/error/count reports according to their frequencies of generation. [*RPT-007*]

The SLOA Validation Service **shall** provide the capability to suppress empty status/error/count reports from distribution. [*RPT-008*]

The SLOA Validation Service **shall** provide the capability to generate status/error/count reports with a list of sortable columns with filtering options based on the Validation/Status/ Error Number(s). [*RPT-009*]

The status/error validation report lines generated by the SLOA Validation Service for SLOA records **shall** comprise the following sortable columns: Log Date, SLOA Record Identifier, System Identifier, Transaction/Event Type, Valid SLOA Indicator, Validation Error/Status Number, and Validation Error/Status Message. [*RPT-010*]

The status/error validation report lines generated by the SLOA Validation Service for Legacy LOA records **shall** comprise the following sortable columns: Log Date, System Identifier, Transaction/Event Type (if available), Valid SLOA Indicator, Validation Error/Status Number, and Validation Error/Status Message. [*RPT-011*]

Reports on invalid SLOA lines, valid SLOA lines, and Legacy LOA **shall** be presented as a single collection of data for each period of reporting. [*RPT-012*]

AAIC	Agency Accounting Identifier Code
ACK/NAK	Acknowledged/Not Acknowledged
ASAP	Automated Standard Application for Payments
ASCII	American Standard Code for Information Interchange
ATC	Availability Type Code
BETC	Business Event Type Code
BLII	Budget Line Item Identifier
BPSM	Business Processes and Systems Modernization
CSV	Comma Separated Value format
DCAS	Defense Cash Accountability System
DCD/DCW	Defense Finance and Accounting Service (DFAS) Corporate Database/Warehouse
DDRS	Defense Departmental Reporting System
DoD	Department of Defense
FDD	Functional Description Document

### 4.0 Acronyms and Glossary

FIDS	Federal Intergovernmental Data Standard
FLEX	Focus Leadership Execution
GEX	Global Exchange Services
IGT	Intragovernmental Transactions
ITS	International Treasury Services
Legacy LOA	Legacy Line of Accounting – a line of accounting that is not a SLOA (also referred to as Non-SLOA)
LOG	Logging
Log Date	Timestamp indicating when the SLOA message was logged by the SLOA Validation Component; also used for Legacy LOA.
MAC	Main Account Code
MAF	Master Appropriation File
OCC	Object Class Code
OUSD	Office of Undersecretary of Defense
OUSD(C)	Office of the Undersecretary of Defense (Comptroller)
PAM	Payment Application Modernization – US Treasury system
PayCollect	Standard file format used to report payment details to DCAS for reconciliation
PDS	Procurement Data Standard
PIR	Payment Information Repository
POAB	Period of Availability Beginning
POAE	Period of Availability Ending
POC	Proof of Concept
PRDS	Purchase Request Data Standard
РҮ	Program Year (value of POAB for SLOA purposes)
RDM	Reference Data Management
RFI	Reimbursable Flag Indicator

SCC	Sub Class Code
SCS	SLOA Centralized Service
SAHI	Sub-Allocation Holder Identifier
SFIS	Standard Financial Information Structure
SLOA Record Identifier	Identifier assigned by the calling GEX transform to identify the SLOA record from the input dataset being validated
SLOA Reporting Data Mart	A database that contains information about the statuses of lines of accounting passing through the system.
SPS	Secure Payment System – US Treasury System
Status Message	A generic term for messages about lines of accounting that traverse GEX and the SLOA Validation Service. Includes Validation Error Messages and Validation Status Messages about SLOAs
Status Number	A generic term for numbers identifying messages about lines of accounting that traverse GEX and the SLOA Validation Service
System Identifier	Identifier that specifies the originating system for the SLOA (i.e., of the system that submitted the SLOA record for validation); also used for Legacy LOA
TAFS	Treasury Account Fund Symbol
TAS	Treasury Account Symbol
Transaction/Event Type	Identifier that specifies the transaction or event from which a SLOA was submitted for validation; e.g., "PAM SPR"; also used for Legacy LOA
Trial Balance	Standard file format used for DoD Accounting Systems to report monthly trial balances to the DDRS
Unique ID	Oracle ID assigned as a primary key to a log record in the SLOA Data Mart
VAL	Validation

Valid SLOA	Indicator describing whether a particular SLOA was valid or invalid. Expanded to include an indicator whether the line in the log was a counting line for Legacy
	LOA (Non-SLOA).
Validation Error Message	A Status Message indicating the validation status of a particular SLOA. For an invalid SLOA, this is an message indicating the validation issue and providing the name(s) and value(s) of the element(s) that failed under validation
Validation Error Number	A number associated with a particular Validation Error Message
Validation Status Message	A Status Message indicating the validation status of a particular SLOA. For a valid SLOA, this is a statement that the record is valid
Validation Status Number	A number associated with a particular Validation Status Message
XML	eXtensible Markup Language

## **Appendix A: SLOA Validation Rule Traceability Matrix**

The traceability matrices in this appendix trace the validation requirements set forth in the body of the document to the business rules from which they derive. This traceability helps provide verification that the appropriate business rules from the *SFIS* Matrix are implemented in the functionality of the application and are properly tested.

Table A1 lists *Key* entries from the *SFIS Matrix 11.2 (05 Feb 2021)*, tab *Data Structure View* column *A* and tab *Assessment Business Rules* column *B*, that are referenced in the traceability tables that appear below. Most of these *Key* entries have been defined as SLOA components.

There are three groupings of requirements collected here, listed as *Validation Type* in the traceback tables. *Syntax* entries describe mechanical aspects of the key component, such as number and type of characters that are valid for the entry. The *Allowable Values* section lists values that are acceptable for the entry, including enumerated lists of values for some entries and referencing external sources of acceptable values in other cases. The *Relational* section describes cases in which the allowable values for an entry are conditional upon the value(s) of one or more other entries. Most, but not all, of the *SFIS* Keys appear in more than one section.

Table A1 summarizes the SFIS SLOA key values that are discussed in the trace back tables.

SFIS SLOA entry	Syntax	Allowable Value	Relational	Comment	
A1	•	•	•	A1: Department Regular Code	
A2	•	•	•	A2: Department Transfer Code	
A3	•	•	•	A3: Main Account Code	
A4	•	•	•	A4: Sub-Account Code	
A7	•	•	•	A7: Sub Class Code	
A9	٠	٠		A9: Reimbursable Flag Indicator	
A27	•	٠	•	A27: Period of Availability Beginning	
A28	•	•	•	A28: Period of Availability Ending	
A29	•	•	•	A29: Availability Type Code	
B4	•			B4: Budget Line Item Identifier	
B6	•	•		B6: Object Class Code	
B12	•		•	B12: Sub-Allocation Holder Identifier (SAHI)	
O2	•	•		Agency Disbursing Identifier Code	
O3	•	•		Agency Accounting Identifier Code (AAIC)	

### Table A1. SFIS SLOA Key Values

SFIS SLOA entry	Syntax	Allowable Value	Relational	Comment
T20	•	•	•	T20: Business Event Type Code (BETC)
T21	•	•	•	T21: Security Cooperation Customer Code
T22	•		•	T22: Security Cooperation Case Designator
T23	•		•	T23: Security Cooperation Case Line Identifier
T27	•	•	•	T27: Security Cooperation Implementing Agency Code
CA1	•		•	CA1: Funding Center Identifier
CA3	•		٠	CA3: Cost Center Identifier
CA4	•		٠	CA4: Project Identifier
CA5	•		•	CA5: Activity Identifier
CA6	•		٠	CA6: Cost Element Code
CA7	•		٠	CA7: Work Order Number
CA15	•		•	CA15: Functional Area Identifier

In certain entries in the Syntax section, various subsets of the ASCII character set are specified. Table A2 lists the subsets used and the names they have been given for this document. The total collection of these data types comprises the list of ASCII printable characters plus NUL, as shown in a later appendix.

NOTICE: Values defined to be "alphanumeric" in the *SFIS Matrix 11.2 (05 Feb 2021)* have been implemented as strings. This follows established customer practices for such data elements. This FDD document retains the notation in the *SFIS Matrix 11.2 (05 Feb 2021)*.

Character Subset Name	Contents (representational)	Contents (ASCII Hex)
Numeric (N)	0-9	0x30 – 0x39
Alphabetic (A)	A – Z, a – z	0x41 – 0x5A (A – Z) 0x61 – 0x7A (a – z)
Alphanumeric (AN)	0 – 9, A – Z, a – z	0x30 – 0x39 (0 – 9) 0x41 – 0x5A (A – Z) 0x61 – 0x7A (a – z)
Other printable characters	[space " "] ! " # \$ % & ' ( ) * + [comma ","] - [period "."] / : ; < = > ? @ [ \ ] ^ _[grave accent `] {   } ~	0x20 – 0x2F 0x3A – 0x40 0x5B – 0x60 0x7B – 0x7E
String (S)	Alphanumeric plus all other printable characters except DELETE (0x7F)	0x20 – 0x7E
Blank	Non-presence of a particular data element. If file format is XML, and there is no data for a specific tag, that tag would not be present. In delimited data formats, a data element is blank if the enclosing delimiters adjacent (with no values shown). In specified-column formats, a data element is blank if spaces (ASCII 0x20) appear in columns for which there are no data.	0x00 (NUL) or 0x20 (space) or no value

**Table A2. Character Subsets** 

In the traceability tables (Tables A3, A4, and A5), letter-number phrases in parentheses [e.g., (A1)], indicate *Key* values in the *SFIS* Matrix, which map to business rules in the *SFIS* Matrix. The keys and business rules mentioned in the following tables are from the *SFIS Matrix 11.2 (05 Feb 2021)*.

Requirement numbering established in previous versions of this document have been retained – e.g., requirement "VAL-001" is still VAL-001, even though it is not the first requirement in the table. The previous numbering was retained for referential integrity with previous versions of the document. Requirements added to this version of the document picked up numbering where the previous version ended; the first new number for this version of the document is VAL-025.

Validation Rules for SLOA Element Syntax (from section 3.2.2.1)								
Requirement #	Requirement Definition	Validation Type	SFIS Matrix Business Rule #	Status	Build Release #			
VAL-027	The SLOA Validation Service <b>shall</b> validate that the Department Regular Code (A1) value is exactly 3 numeric characters in length, if the value is present.	Syntax	185550	Implemented	1.1			
VAL-028	The SLOA Validation Service <b>shall</b> validate that the Department Transfer Code (A2) value is exactly 3 numeric characters in length, if the value is present.	Syntax	185553	Implemented	1.1			
VAL-029	The SLOA Validation Service <b>shall</b> validate that the Main Account Code (A3) value is exactly 4 numeric characters in length, if the value is present.	Syntax	185556	Implemented	1.1			
VAL-030	The SLOA Validation Service <b>shall</b> validate that the SubAccount Code (A4) value is exactly 3 numeric characters in length, if the value is present.	Syntax	185559	Implemented	1.1			
VAL-031	The SLOA Validation Service <b>shall</b> validate that the Sub Class Code (A7) value is exactly 2 numeric characters in length, if the value is present.	Syntax	185568	Implemented	1.1			
VAL-001	The SLOA Validation Service <b>shall</b> validate that the Reimbursable Flag Indicator (A9) value is exactly 1 alphabetic character in length, if the value is present.	Syntax	185574	Implemented	1.0			
VAL-032	The SLOA Validation Service <b>shall</b> validate that the Period of Availability Beginning (POAB) (A27) value is exactly 4 numeric characters in length, if the value is present. Note that checks for Program Year (PY) are done inside each specific system interface graph and not as part of the SLOA Validation Service.	Syntax	720603	Implemented	1.1			
VAL-033	The SLOA Validation Service <b>shall</b> validate that the Period of Availability Ending (A28) value is exactly 4 numeric characters in length, if the value is present.	Syntax	720610	Implemented	1.1			
VAL-002	The SLOA Validation Service <b>shall</b> validate that the Availability Type Code (A29) value is exactly 1 alphabetic character in length, if the value is present.	Syntax	1005232	Implemented	1.0			

 Table A3. Validation Rules for SLOA Element Syntax (from section 3.2.2.1)

Validation Rules for SLOA Element Syntax (from section 3.2.2.1)									
Requirement #	Requirement Definition	Validation Type	SFIS Matrix Business Rule #	Status	Build Release #				
VAL-060	The SLOA Validation Service shall validate the POAB and the POAE based on the Availability Type value. If it is 'X' then POAB should be the only field with a value and will be validated against the MAF.	Syntax	1005191	Implemented	1.1				
VAL-026	The SLOA Validation Service <b>shall</b> validate that the Budget Line Item Identifier (B4) value is not more than 16 alphanumeric characters in length, if the value is present.	Syntax	185637	Implemented	1.1				
VAL-034	The SLOA Validation Service <b>shall</b> validate that the Object Class Code (B6) value is not less than 3 and not more than 6 string characters in length, if the value is present.	Syntax	185643	Implemented	1.1				
VAL-003	The SLOA Validation Service <b>shall</b> validate that the SubAllocation Holder Identifier (B12) value is exactly 4 alphanumeric characters in length, if the value is present.	Syntax	1005213	Implemented	1.0				
VAL-035	The SLOA Validation Service <b>shall</b> validate that the Agency Disbursing Identifier Code (O2) value is not more than 8 numeric characters in length, if the value is present.	Syntax	185655	Implemented	1.1				
VAL-036	The SLOA Validation Service <b>shall</b> validate that the Agency Accounting Identifier Code (O3) value is exactly 6 numeric characters in length, if the value is present.	Syntax	185658	Implemented	1.1				
VAL-037	The SLOA Validation Service <b>shall</b> validate that the Business Event Type Code (T20) value is not more than 8 alphabetic characters in length, if the value is present.	Syntax	190064	Implemented	1.1				
VAL-038	The SLOA Validation Service <b>shall</b> validate that the Security Cooperation Customer Code (T21) value is not less than 2 and not more than 3 alphanumeric characters in length, if the value is present.	Syntax	190077	Implemented	1.1				
VAL-039	The SLOA Validation Service <b>shall</b> validate that the Security Cooperation Case Designator (T22) value is not less than 3 and not more than 4 alphanumeric characters in length, if the value is present.	Syntax	190074	Implemented	1.1				
VAL-040	The SLOA Validation Service <b>shall</b> validate that the Security Cooperation Case Line Item Identifier (T23) value is exactly 3 alphanumeric characters in length, if the value is present.	Syntax	190081	Implemented	1.1				

	Validation Rules for SLOA Element Sy	ntax (from s	ection 3.2.2.1	)	
Requirement #	Requirement Definition	Validation Type	SFIS Matrix Business Rule #	Status	Build Release #
VAL-041	The SLOA Validation Service <b>shall</b> validate that the Security Cooperation Implementing Agency Code (T27) value is exactly 1 alphabetic character in length, if the value is present.	Syntax	1005205	Implemented	1.1
VAL-042	The SLOA Validation Service <b>shall</b> validate that the Funding Center Identifier (CA1) value is not more than 16 alphanumeric characters in length, if the value is present.	Syntax	190014	Implemented	1.1
VAL-043	The SLOA Validation Service <b>shall</b> validate that the Cost Center Identifier (CA3) value is not more than 16 alphanumeric characters in length, if the value is present.	Syntax	190018	Implemented	1.1
VAL-044	The SLOA Validation Service <b>shall</b> validate that the Project Identifier (CA4) value is not more than 25 alphanumeric characters in length, if the value is present.	Syntax	190026	Implemented	1.1
VAL-045	The SLOA Validation Service <b>shall</b> validate that the Activity Identifier (CA5) value is not more than 16 alphanumeric characters in length, if the value is present.	Syntax	190031	Implemented	1.1
VAL-046	The SLOA Validation Service <b>shall</b> validate that the Cost Element Code (CA6) value is not more than 16 alphanumeric characters in length, if the value is present.	Syntax	190037	Implemented	1.1
VAL-061	The SLOA Validation Service <b>shall</b> validate that the Work Order Number (CA7) value is not more than 16 alphanumeric characters in length, if the value is present.	syntax	190043	Implemented	1.1
VAL-047	The SLOA Validation Service <b>shall</b> validate that the Functional Area Identifier (CA15) value is not more than 16 alphanumeric characters in length, if the value is present.	Syntax	1005168	Implemented	1.1

	Validation Rules for SLOA Elem	ent Values (	from section 3.2.2	.2)	
Requirement #	Requirement Definition	Validation Type	SFIS Matrix Business Rule #	Status	Build Release #
VAL-004	The SLOA Validation Service <b>shall</b> validate the Department Regular Code (A1) value against the list of valid Department Regular Code values from the <i>SFIS Values Library</i> , if the value is present.	Allowable Values	185550, 185552, 190070, 1005148, 1005149, 1005150, 1005234	Implemented	1.0
VAL-048	The SLOA Validation Service <b>shall</b> validate the Department Transfer Code (A2) value against the list of valid Department Transfer Code values from the <i>SFIS Values Library Master</i> <i>Appropriation File</i> , if the value is present.	Allowable Values	185553, 185554, 1005151, 1005152, 1005153, 1005154	Implemented	1.1
VAL-049	The SLOA Validation Service <b>shall</b> validate the Main Account Code (A3) value against the list of valid Main Account Code values from the <i>SFIS</i> <i>Values Library Master Appropriation File</i> , if the value is present.	Allowable Values	185556, 182983, 185557, 1005174, 1005175, 185558, 190088	Implemented	1.1
VAL-050	The SLOA Validation Service <b>shall</b> validate the SubAccount Code (A4) value against the list of valid Sub- Account Code values from the <i>SFIS</i> <i>Values Library Master Appropriation File</i> , if the value is present.	Allowable Values	185559, 182987, 182989, 185560, 1005207, 1005208, 1005209, 185561	Implemented	1.1
VAL-005	The SLOA Validation Service <b>shall</b> validate the Sub Class Code (A7) value against the list of unique Sub Class Code values from the <i>SFIS Values</i> <i>Library Master Appropriation File</i> , if the value is present.	Allowable Values	185568, 185569, 1005214, 185570	Implemented	1.0
VAL-006	The SLOA Validation Service <b>shall</b> validate the Reimbursable Flag (A9) value against the list of valid values, "R" (Reimbursable) or "D" (Direct) as identified in the <i>SFIS</i> Matrix, if the value is present.	Allowable Values	185574, 182995, 1005194, 185576	Implemented	1.0
VAL-007	The SLOA Validation Service <b>shall</b> return an error if the Reimbursable Flag (A9) is blank. <b>[VAL-007]</b>	Allowable Values	185574	Implemented	1.0

 Table A4. Validation Rules for SLOA Element Values (from section 3.2.2.2)

	Validation Rules for SLOA Elem	ent Values (f	from section 3.2.2	.2)	
Requirement #	Requirement Definition	Validation Type	SFIS Matrix Business Rule #	Status	Build Release #
VAL-008	The SLOA Validation Service <b>shall</b> validate the Availability Type (A29) value against the list of valid values	Allowable Values	1005232	Implemented	1.0
	<ul> <li>"C" (Canceled TAS),</li> <li>"F" (Clearing/Suspense TAS),</li> <li>"X" (No-year TAS), or</li> <li>Blank (Multi-year or Annual TAS, unavailable receipt TAS)</li> </ul>				
	as identified in the <i>SFIS</i> Matrix, if the value is present.				
VAL-009	The SLOA Validation Service <b>shall</b> validate the Object Class (B6) value against the list of valid Object Class values from the <i>SFIS Values Library</i> , if the value is present.	Allowable Values	185643	Implemented	1.0
VAL-010	The SLOA Validation Service <b>shall</b> validate the Agency Disbursing Identifier (O2) value against the list of valid Agency Disbursing Identifier values from the <i>SFIS Values Library</i> , if the value is present.	Allowable Values	185655	Implemented	1.0
VAL-011	The SLOA Validation Service <b>shall</b> validate the Agency Accounting Identifier (O3) value against the list of valid Agency Accounting Identifier values from the <i>SFIS Values Library</i> , if the value is present.	Allowable Values	185658	Implemented	1.0
VAL-012	The SLOA Validation Service <b>shall</b> validate the Business Event Type Code (BETC) (T20) value against the list of valid BETC values from the <i>SFIS Values</i> <i>Library</i> , if the value is present.	Allowable Values	190064, 190065, 190063, 1005135	Implemented	1.0
VAL-013	The SLOA Validation Service <b>shall</b> validate the Security Cooperation Customer Code (T21) value against the list of valid Security Cooperation Customer Code values from the <i>SF/S</i> <i>Values Library</i> , if the value is present.	Allowable Values	190077	Implemented	1.0
VAL-014	The SLOA Validation Service <b>shall</b> validate the Security Cooperation Implementing Agency Code (T27) value against the list of valid Security Implementing Agency values from the <i>SFIS Values Library</i> , if the value is present.	Allowable Values	1005205	Implemented	1.0

Table A5. Validation Rules for Relationships between SLOA Elements (from section
3.2.2.3)

	Validation Rules for Relationships between SLC	<b>DA Elements</b>	(from section 3	3.2.2.3)	
Requirement #	Requirement Definition	Validation Type	SFIS Matrix Business Rule #	Status	Build Release #
VAL-015	The SLOA Validation Service <b>shall</b> validate that the combination of SLOA values when an unidentified transaction type is sent for validation, as found in the record being validated, exist in a record within the <i>SFIS Values Library Master Appropriation File (MAF)</i> . This is a table driven rule and is outlined in Appendix B. The SLOA values in the MAF include: • Department Regular Code (A1), • Department Transfer Code (A2), • Period of Availability Beginning (A27), • Period of Availability Ending(A28), • Availability Type Code (A29), • Main Account Code (A3), • Sub Class Code (A7), • Business Event Type Code (BETC) (T20) This is known as the default <i>MAF Validation Rule</i> (As shown in Appendix B).	Relational	(A1): 185550 (A2): 185553 (A3): 185556 (A4): 182987, 185559 (A7): 185568 (A27-A29): See VAL- 051-059 (T20): 190064	Implemented	1.0
VAL-016	The SLOA Validation Service <b>shall</b> validate that the Sub Allocation Holder Identification (SAHI) (B12) value (as provided in the TAFS to B12 Table in the MAF) is not blank when the Department Regular Code (A1) or Department Transfer Code (A2) value is '097'.	Relational	TAFS to B12 Table	Implemented	1.0, 1.2
VAL-066	<ul> <li>The SLOA Validation Service shall validate that the combination of SAHI and TAS values provided in the transaction records being validated against the TAFS to B12 Table elements. TAS values in the TAFS to B12 table include: <ul> <li>SAHI Code (can either be an actual SAHI value or the term 'SAHI' – anything else will be an error)</li> <li>Department Regular Code</li> <li>Department Transfer Code</li> <li>Main Account Code</li> <li>Period of Availability Beginning</li> <li>Sub Account Code</li> <li>Sub Class Code</li> <li>Availability Type Code</li> </ul> </li> <li>Although these elements are included in the TAFS to B12 Table.</li> </ul>	Relational	TAFS to B12 Table	Implemented	1.2

	Validation Rules for Relationships between SLOA Elements (from section 3.2.2.3)												
Requirement #	Requirement Definition	Validation Type	SFIS Matrix Business Rule #	Status	Build Release #								
	'Is Valid' Value and 'Effective Date' are not used in the validation.												
VAL-067	The SLOA Validation Service <b>shall</b> validate if the SAHI (B12) value is blank in the transaction record when the TAFS to B12 table look up validation returns the value of "SAHI" in the SAHI TAFS to B12 Code field.	Relational	TAFS to B12 Table	Implemented	1.2								
VAL-017	<ul> <li>The SLOA Validation Service shall validate that the Funding Center Identifier (CA1) value is populated if at least one of the values is populated.</li> <li>Cost Center (CA3),</li> <li>Project Identifier (CA4),</li> <li>Activity Identifier (CA5),</li> <li>Cost Element Code (CA6),</li> <li>Work Order Number (CA7), or</li> <li>Functional Area Identifier (CA15)</li> </ul>	Relational	190012	Implemented	1.0								
VAL-062	<ul> <li>The SLOA Validation Service shall validate that at least one of the values is populated if the Funding Center Identifier (CA1) is populated.</li> <li>Cost Center (CA3),</li> <li>Project Identifier (CA4),</li> <li>Activity Identifier (CA5),</li> <li>Cost Element Code (CA6),</li> <li>Work Order Number (CA7), and Functional Area Identifier (CA15)</li> </ul>	Relational	190017 190023 190030 (none for CA6) 190040 1005159	Implemented	1.1								
VAL-018	The SLOA Validation Service <b>shall</b> validate that the Security Cooperation Case Designator (T22), Security Cooperation Case Line Item (T23), and Security Cooperation Implementing Agency Code (T27) values are all present when the Security Cooperation Customer Code (T21) value is present.	Relational	190078	Implemented	1.0								
VAL-019	The SLOA Validation Service <b>shall</b> validate that the Security Cooperation Customer Code (T21), Security Cooperation Case Line Item (T23), and Security Cooperation Implementing Agency Code (T27) values are all present when the Security Cooperation Case Designator (T22) value is present.	Relational	190071, 190079	Implemented	1.0								
VAL-020	The SLOA Validation Service <b>shall</b> validate that the Security Cooperation Customer Code (T21), Security Cooperation Case Designator (T22), and Security Cooperation Implementing Agency Code	Relational	190072	Implemented	1.0								

	Validation Rules for Relationships between SLC	A Elements	(from section	3.2.2.3)	
Requirement #	Requirement Definition	Validation Type	SFIS Matrix Business Rule #	Status	Build Release #
	(T27) values are all present when the Security Cooperation Case Line Item (T23) value is present.				
VAL-021	The SLOA Validation Service <b>shall</b> validate that the Security Cooperation Customer Code (T21), Security Cooperation Case Designator (T22), and Security Cooperation Case Line Item (T23) values are all present when the Security Cooperation Implementing Agency Code (T27) value is present.	Relational	1005195	Implemented	1.0
VAL-025	The SLOA Validation Service <b>shall</b> validate that the Budget Line Item Identifier (BLII) (B4) is present when value of Main Account (A3) is within the range 0000-3999. (Note: Soon to have discreet BLI populated; BLI	Relational	(no BR# found in <i>SFIS</i> 10MR. See authoritative sources for BRs	Implemented	1.1
	can be rolled into lower elements; there will be a future table for BLI values for SVS updates – date to be determined)		1100104, 185637, and 185634)		
VAL-051	If the Availability Type Code (A29) value is blank, then the SLOA Validation Service <b>shall</b> validate that the value of the Period of Availability Beginning (PBOA) (A27) is a four-digit alphanumeric value or is blank. =====	Relational	1005232, 1005116, 1005120, 720603, 720602	Implemented	1.1
	This applies to: Annual/multiyear accounts; Unavailable accounts; Unavailable receipt main accounts; and Miscellaneous receipt main accounts.				
	It has been asserted that this value type will be changed from 4alphanumeric to 4 numeric in a future version of the <i>SFIS</i> .				
VAL-052	If the Availability Type Code (A29) value is blank and the Period of Availability Beginning (A27) is a four alphanumeric value, then the SLOA Validation Service <b>shall</b> validate that the value of the Period of Availability Ending (POAE) (A28) is a four-alphanumeric value.	Relational	1005232, 1005116, 720610, 720612	Implemented	1.1
	This applies to: Annual/multiyear accounts.				
	requirement) If the POAB (A27) and POAE (A28) are both numeric values representing years, then the value of POAE must represent the same or a later year than the value of POAB				

	Validation Rules for Relationships between SLC	OA Elements	(from section	3.2.2.3)	-
Requirement #	Requirement Definition	Validation Type	SFIS Matrix Business Rule #	Status	Build Release #
VAL-068	If the POAB (A27) and POAE (A28) are both numeric values representing years, then the value of the POAE must be greater than or equal to the value of POAB.	Relational	1005232, 1005116, 720610, 720612	Implemented	1.1
VAL-053	If the Availability Type Code (A29) value is blank and the Period of Availability Beginning (A27) is blank, then the SLOA Validation Service <b>shall</b> validate that the value of the Period of Availability Ending (A28) is blank. ===== This applies to: Unavailable accounts; Unavailable receipt main accounts; Miscellaneous receipt main	Relational	1005232, 1005120, 720609	Implemented	1.1
	accounts				
VAL-054	If the Availability Type Code (A29) value is uppercase 'C' (ASCII 0x43), then the SLOA Validation Service <b>shall</b> validate that the value of the Period of Availability Beginning (POAB) (A27) is blank. ==== This applies to: Canceled main accounts.	value is Relational 100 the SLOA hat the value of g (POAB) (A27) counts.		Implemented	1.1
VAL-055	If the Availability Type Code (A29) value is uppercase 'C' (ASCII 0x43), then the SLOA Validation Service <b>shall</b> validate that the value of the Period of Availability Ending (POAE) (A28) is blank. ===== This applies to: Canceled main account	Relational	1005232, inference from 1005119	Implemented	1.1
VAL-056	If the Availability Type Code (A29) value is uppercase 'F' (ASCII 0x46), then the SLOA Validation Service <b>shall</b> validate that the value of the Period of Availability Beginning (POAB) (A27) is blank. ===== This applies to: Clearing main accounts; Suspense main accounts	Relational	1005232, 1005118, 720601	Implemented	1.1
VAL-057	If the Availability Type Code (A29) value is uppercase 'F' (ASCII 0x46), then the SLOA Validation Service <b>shall</b> validate that the value of the Period of Availability Ending (POAE) (A28) is blank. ===== This applies to: Clearing main accounts; Suspense		1005232, 1005118, 720608	Implemented	1.1
	main accounts				

	Validation Rules for Relationships between SLC	Validation Rules for Relationships between SLOA Elements (from section 3.2.2.3)											
Requirement #	Requirement Definition	Validation Type	SFIS Matrix Business Rule #	Status	Build Release #								
VAL-058	If the Availability Type Code (A29) value is uppercase 'X' (ASCII 0x58), then the SLOA Validation Service <b>shall</b> validate that the value of the Period of Availability Beginning (POAB) (A27) is a four-digit numeric value or is blank.	Relational	1005232, 1005117, 1005187, 1005185, 1005191	Implemented	1.1								
VAL-059	If the Availability Type Code (A29) value is uppercase 'X' (ASCII 0x58), then the SLOA Validation Service <b>shall</b> validate that the value of the Period of Availability Ending (A28) is blank. ===== This applies to: No-year funding; No-year funding with fiscal accountability	Relational	1005232, 720611	Implemented	1.1								
VAL-064	The SLOA Validation Service <b>shall</b> validate against the MAF table with varying elements based on transaction type. (Transaction Type rule sets are listed in Appendix B.)	Relational	See SFIS 11 Matrix, SFIS System Category columns	Implemented	1.1								
VAL-065	The SLOA Validation Service <b>shall</b> provide the capability to include Period of Availability Beginning (POAB) (A27) when performing all MAF validations based on transaction type, if Availability Type Code (A29) is X (As shown in Appendix B).		See SFIS 11 Matrix, SFIS System Category columns	Implemented	1.2								

## Appendix B. Rule Sets by Transaction Type and Business Rules

Table B1 illustrates the association of SFIS elements used to validate against the MAF by transaction type.

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								System and Interface										
					ITS	ITS	PAM	ASAP	PayCollect	PDS	PIR	PRDS	PRDS	PRDS	FIDS	FIDS	TrialBalance	Default
SFIS <u>11</u> <u>Key</u>	<u>SFIS</u> <u>BR#</u>	SLOA	Business Rule text	Rule Name	ITS Check	ITS Wire	PAM SPR	ASAP VAL	DoD Disbursing Detail	PDS	PIR SRF	IGT PR	IGT PR Acceptance	Vendor Contract	Acceptance	Order	TrialBalance	Default SLOA Validation
				Master Appropriation F	ile	,												
A1		٠	Department Regular Code	Master Appropriation Validation	•	•	٠	٠	٠	٠	•	٠	•	•	٠	•	•	•
A2		•	Department Transfer Code	Master Appropriation Validation	•	•	٠	٠	٠	•	٠	٠	٠	٠	٠	٠	•	•
A27		٠	Period of Availability Beginning	Master Appropriation Validation	•	•	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	•	•
			When Availability Type Code = X, include POAB (A27)														•	
A28		•	Period of Availability Ending	Master Appropriation Validation	•	•	•	٠	•	٠	•	•	•	•	٠	•	•	•
A29		•	Availability Type Code	Master Appropriation Validation	•	•	٠	•	•	٠	٠	•	•	•	٠	٠	•	•

								System and Interface										
					ITS	ITS	PAM	ASAP	PayCollect	PDS	PIR	PRDS	PRDS	PRDS	FIDS	FIDS	TrialBalance	Default
SFIS <u>11</u> <u>Key</u>	SFIS BR#	SLOA	Business Rule text	Rule Name	ITS Check	ITS Wire	PAM SPR	ASAP VAL	DoD Disbursing Detail	PDS	PIR SRF	IGT PR	IGT PR Acceptance	Vendor Contract	Acceptance	Order	TrialBalance	Default SLOA Validation
				Master Appropriation F	ile													
A3		•	Main Account Code	Master Appropriation Validation	٠	٠	٠	٠	٠	٠	٠	٠	•	•	٠	٠	•	•
A7		•	Sub Class Code	Master Appropriation	٠	•	٠	٠	٠		٠	٠		•		٠		•
A4		•	Sub Account Code	Master Appropriation Validation	•	•	•	٠	•	•	•	•	•	•	•	•	•	•
T20		•	Business Event Type Code	Master Appropriation Validation	٠	•	٠	•	٠		٠							•

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Table B2 illustrates the association of SFIS elements used to validate the SAHI B12 against the TAFS to B12 file.

												Sys	stem	n an	d In	terfa	ace	
					ITS	ITS	PAM	ASAP	PayCollect	PDS	PIR	PRDS	PRDS	PRDS	FIDS	FIDS	TrialBalance	Default
SFIS <u>11</u> <u>Key</u>	<u>SFIS</u> <u>BR#</u>	SLOA	Business Rule text	Rule Name	ITS Check	ITS Wire	PAM SPR	ASAP VAL	DoD Disbursing Detail	PDS	PIR SRF	IGT PR	IGT PR Acceptance	Vendor Contract	Acceptance	Order	TrialBalance	Default SLOA Validation
	·		Sub Alloc	ation Holder Identification (SAF	II)													
B12			SAHI Code						٠	٠		٠	٠	٠	٠	٠	٠	٠
A1	1005 23	٠	Department Regular Code	BR 100523 SAHI B12 Rules Validation					•	٠		٠	٠	٠	٠	٠	٠	•
A2	1005 23	٠	Department Transfer Code	BR 100523 SAHI B12 Rules Validation					٠	٠		٠	٠	٠	٠	٠	٠	٠
A3	1005 23	٠	Main Account Code	BR 1005213 SubAllocHold B12 Validation					٠	٠		٠	٠	٠	٠	٠	٠	٠
A27	1005 23	•	Period of Availability Beginning	BR_1005213_SubAllocHold_ B12 Validation					٠	٠		٠	٠	٠	٠	٠	٠	٠
A29	1005 23	•	Period of Availability Ending	BR_1005213_SubAllocHold_ B12 Validation					٠	٠		٠	•	•	•	•	٠	•
A7	1005 23	٠	Sub Account Code	BR 1005213 SubAllocHold B12 Validation					٠	٠		٠	٠	٠	٠	٠	٠	٠

 Table B2. Rule Sets – SAHI Validations

												Sys	stem	n an	d In	terfa	ace	
					ITS	ITS	PAM	ASAP	PayCollect	SQA	PIR	PRDS	PRDS	PRDS	FIDS	FIDS	TrialBalance	Default
SFIS <u>11</u> <u>Key</u>	SFIS BR#	SLOA	Business Rule text	Rule Name	ITS Check	ITS Wire	PAM SPR	ASAP VAL	DoD Disbursing Detail	PDS	PIR SRF	IGT PR	IGT PR Acceptance	Vendor Contract	Acceptance	Order	TrialBalance	Default SLOA Validation
			Sub Alloca	ation Holder Identification (SAH	I)													
A4	1005 23	٠	Sub Class Code	BR_1005213_SubAllocHold_ B12 Validation					٠	٠		٠	٠	٠	٠	٠	٠	•
A29	1005 23	•	Availability Type Code	BR_1005213_SubAllocHold_ B12 Validation					•	•		•	٠	•	•	٠	٠	•
			Is Valid Account ID (Not Used)															
			Effective Date (Not Used)															

Table B3 illustrates the association of SFIS Business Rules to specific systems and interfaces. These associations form "rule sets" that the SLOA Validation Service utilizes to execute Lines of Accounting. Only those business rules that reference SLOA elements are incorporated into and executed by the SLOA Validation Service; these comprise a subset of the comprehensive set of business rules included in SFIS Matrix 11.0. More detail on these business rules, and the SFIS System Categories in columns F-X of tab "Assessment Business Rules", can be seen in the SFIS Matrix 11.0.

												Sys	stem	n an	d In	terfa	ace	
					ITS	ITS	PAM	ASAP	PayCollect	SQA	PIR	PRDS	PRDS	PRDS	FIDS	FIDS	TrialBalance	Default
<u>SFIS 11</u> <u>Key</u>	<u>SFIS</u> <u>BR#</u>	SLOA	Business Rule text	Rule Name	ITS Check	ITS Wire	PAM SPR	ASAP VAL	DoD Disbursing Detail	PDS	PIR SRF	IGT PR	IGT PR Acceptance	Vendor Contract	Acceptance	Order	TrialBalance	Default SLOA Validation
A1	1855 50	*	Department Regular Code must be 3 numeric characters. ex. 097 Authoritative source: https://www.sam.fms.treas.gov/sam public/tasbetc.htm	BR_185550_DeptReg_A1 Validation	•	•	•	•	•	•	•	•	•	•	•	•	•	•
A2	1855 53	•	Department Transfer Code must be 3 numeric characters. ex. 097 Authoritative source: https://www.sam.fms.treas.gov/sampublic/tas betc.htm	BR_185553_DeptTrans_A2 Validation	•	•	•	•	•	•	•	•	•	•	•	•	•	•

#### Table B3. Rule Sets by Transaction Type

												Sys	tem	n an	d In	terfa	ce	
					ITS	ITS	MAA	dysa	PayCollect	PDS	PIR	PRDS	PRDS	PRDS	FIDS	FIDS	TrialBalance	Default
<u>SFIS 11</u> <u>Key</u>	<u>SFIS</u> <u>BR#</u>	SLOA	Business Rule text	Rule Name	ITS Check	ITS Wire	PAM SPR	ASAP VAL	DoD Disbursing Detail	PDS	PIR SRF	IGT PR	IGT PR Acceptance	Vendor Contract	Acceptance	Order	TrialBalance	Default SLOA Validation
A3	1855 56	•	Main Account Code must be 4 numeric characters. ex. 0740 Authoritative source: https://www.sam.fms.treas.gov/sampublic/tas betc.htm	BR_185556 MainAcct_A3 Validation	•	•	•	•	•	•	•	•	•	•	•	•	٠	•
A4	1855 59	•	Sub-Account Code must be 3 numeric characters. ex. 001 Authoritative source: https://www.sam.fms.treas.gov/sampubli c/tasbetc.htm	BR 185559 SubAcct A4 Validation	٠	•	•	•	•	•	•	•	•	•	•	•	٠	•
A7	1855 68	•	Sub-Class must be 2 numeric characters. ex. 46 Authoritative source: https://www.sam.fms.treas.gov/sampubli c/tasbetc.htm	BR_185568_SubClassCd_A7 Validation	•	•	•	•	•		•	•		•	•			•

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												Sys	terr	n an	d In	terfa	ice	
					ITS	ITS	PAM	ASAP	PayCollect	PDS	PIR	PRDS	PRDS	PRDS	FIDS	FIDS	TrialBalance	Default
<u>SFIS 11</u> <u>Key</u>	<u>SFIS</u> <u>BR#</u>	SLOA	Business Rule text	Rule Name	ITS Check	ITS Wire	PAM SPR	ASAP VAL	DoD Disbursing Detail	PDS	PIR SRF	IGT PR	IGT PR Acceptance	Vendor Contract	Acceptance	Order	TrialBalance	Default SLOA Validation
A9	1855 74	٠	Reimbursable Flag Indicator must be 1 alpha character. ex. R Data values: R - Reimbursable D - Direct	BR_185574_ReimbFlag_A9 Validation					•	•		•		•		•	•	•
B4	1856 37	•	Budget Line Item Identifier may be up to 16 alpha numeric characters. ex. 4962 05057041 Authoritative source: http://comptroller.defense.gov/BudgetMaterial s.aspx https://guidanceweb.OUSD(C).osd.mil/efd.as p x	BR 185637 BLII B4 Validation					•	•		•		•		•	•	•
B6	185 643	•	Object Class Code must be a maximum of 6 numeric characters. (For example 117 - to represent 11.7 as identified on the OMB Circular) Authoritative source:	BR 185643 ObjectClass B 6 Validation					•	•		•		•		•	•	•

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												Sys	tem	an	d Int	terfa	ice	
					ITS	ITS	PAM	ASAP	PayCollect	PDS	PIR	PRDS	PRDS	PRDS	FIDS	FIDS	TrialBalance	Default
<u>SFIS 11</u> <u>Key</u>	<u>SFIS</u> <u>BR#</u>	SLOA	Business Rule text	Rule Name	ITS Check	ITS Wire	PAM SPR	ASAP VAL	DoD Disbursing Detail	PDS	PIR SRF	IGT PR	IGT PR Acceptance	Vendor Contract	Acceptance	Order	TrialBalance	Default SLOA Validation
			http://www.whitehouse.gov/omb/circu lars/a11/current year/a11 toc.html															
B12	1005 23	٠	Sub-Allocation Holder Identifier	BR 1005213 SAHI B12 Rule					٠	٠		٠	٠	٠	٠	٠	٠	•
O2	1856 55	•	Agency Disbursing Identifier (DSSN/ALC) Code may be up to 8 numeric characters. ex. 1700 Authoritative source: https://beis.csd.disa.mil/sfislib/sf_lib_combo.x ml	BR_185655_ADI_O2 Validation	•	•	•	•	•		•	•	•		•	٠		•
03	1856 58	•	Agency Accounting Identifier Code (FSN/AAA/ADSN) may be 6 numeric characters. ex. 000318 Authoritative source: https://beis.csd.disa.mil/sfislib/sf_lib_combo.x ml	BR_185658_AAI_O3 Validation					•	•		•	•	•	•	•		•
CA1	1900 12	•	At the time of budget execution, a Funding Center Identifier must be associated with at	BR 190012 FundCenter CA1 Validation					٠	٠		•	٠	٠	٠	٠		•

												Sys	terr	n an	d In	terfa	ice	
					ITS	ITS	PAM	ASAP	PayCollect	PDS	PIR	PRDS	PRDS	PRDS	FIDS	FIDS	TrialBalance	Default
<u>SFIS 11</u> <u>Key</u>	<u>SFIS</u> <u>BR#</u>	SLOA	Business Rule text	Rule Name	ITS Check	ITS Wire	PAM SPR	ASAP VAL	DoD Disbursing Detail	PDS	PIR SRF	IGT PR	IGT PR Acceptance	Vendor Contract	Acceptance	Order	TrialBalance	Default SLOA Validation
			least one other cost object. The SFIS Cost Objects are Funding Center, Cost Center, Project, Activity, Cost Element Code, Work Order Number, & Functional Area.															
CA3	1900 17	٠	Cost Center Identifier must be associated with one or more Funding Center Identifiers.	BR_190017_FundCenter_CA1 Validation					•	٠		٠	٠	•	٠	•		•
T20	1900 64	٠	Business Event Type Code (BETC) must be no more than 8 alpha characters. ex. COLL Authoritative source: http://fms.treas.gov/gwa/factsheet_betc.html	BR_190064_BETC_T20 Validation	•	•	•	•	•		•							•
T22	190 072	•	Each Security Cooperation Case Designator must have at least one Security Cooperation Case Line Item Identifier.	BR_190072_SecCoopCaseLII_ T23 Validation					•	٠		٠	٠	٠	٠	٠	٠	•
T21	1900 77	٠	Security Cooperation Customer Code must be 3 alpha-numeric characters. ex. El Authoritative source: http://www.samm.dsca.mil/table/tablec4t2a	BR_190077_SecCoopCustCd_ T21 Validation					•	•		•	•	•	•	•	•	•

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												Sys	stem	n an	d In	terfa	ice	
					ITS	ITS	PAM	ASAP	PayCollect	PDS	PIR	PRDS	PRDS	PRDS	FIDS	FIDS	TrialBalance	Default
<u>SFIS 11</u> <u>Key</u>	<u>SFIS</u> <u>BR#</u>	SLOA	Business Rule text	Rule Name	ITS Check	ITS Wire	PAM SPR	ASAP VAL	DoD Disbursing Detail	PDS	PIR SRF	IGT PR	IGT PR Acceptance	Vendor Contract	Acceptance	Order	TrialBalance	Default SLOA Validation
T21	1900 78	•	If the system executes Foreign Military Sales (FMS) transactions, then each system must store and maintain Security Cooperation Customer Code values.	BR_190078_SecCoopCustCd_ T21 Validation					•	•		•	•	•	•	•	•	•
T23	1900 79	•	Security Cooperation Case Line Item Identifier must be associated with only one Security Cooperation Case Identifier.	BR_190079_SecCoopCaseDes ig_T22 Validation					٠	٠		٠	٠	٠	٠	•	•	•
T22	1005 195	•	Each Security Cooperation Case Designator must have only one Security Cooperation Implementing Agency.	BR 1005195 SecCoopImpAgcy T27 Validation					•	•		•	•	•	•	•	•	•
T27	1005 205	•	Security Cooperation Implementing Agency Code must be 1 alphanumeric characters. Authoritative source: http://www.samm.dsca.mil/table/tablec5t2	BR_1005205_SecCoopImpAgc y T27 Validation					•	•		•	•	•	٠	•	•	•

## Appendix C. Production Build Release – Requirements Map

Table C1 shows the correspondence between the requirements specified in this document and SLOA Validation Service builds.

Docume	nt Release		Description
Version	Date		Requirements
1.0	2016 09 26	Unchanged:	(none)
		New:	RDM-001 through -016
			VAL-001 through -024
			LOG-001 through -007
			RPT-001 through -010
		Modified:	(none)
		Deprecated:	(none)
1.1	2017 09 08	Unchanged:	RDM-001 through -016
			VAL-016, -018 through -024
		New:	RDM-017 through -026
			VAL-025 through -062, -064
			LOG-008 through -024
			RPT-011 through -012
		Modified:	VAL-001 through -015, -017
			LOG-001 through -007
		Denregeted	
		Deprecated:	
1.2	2018 08 10	Unchanged:	RDM-001 through -016
			VAL-001throughVAL-31; VAL-040-064
		New:	(none)
		Modified:	VAL-032 through VAL-034; VAL-038, VAL-039
		Deprecated:	(none)

 Table C1. SLOA Validation Service Build – Requirements Map

# **Appendix D. ASCII Characters**

Table D1 lists the entire set of ASCII characters used for SLOA data.

Table D1. ASCII Characte	rs
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	ASCII Characters and subsets used in	SLOA el	ements		
Symbol	Description	DEC	OCT	HEX	Subset
	NUL	0	0	00	"blank"
	control characters, non-printable, not used	1-31	1-39	01-1F	not used
	Space	32	40	20	"blank", other printable
!	Exclamation mark	33	41	21	other printable
"	Double quotes	34	42	22	other printable
#	Number sign (sharp sign, hashtag)	35	43	23	other printable
\$	Dollar sign	36	44	24	other printable
%	Percent. Sign	37	45	25	other printable
&	Ampersand	38	46	26	other printable
'	Single quote	39	47	27	other printable
(	Open parenthesis	40	50	28	other printable
)	Close parenthesis	41	51	29	other printable
*	Asterisk	42	52	2A	other printable
+	Plus	43	53	2B	other printable
,	Comma	44	54	2C	other printable
-	Hyphen	45	55	2D	other printable
	Period (dot or full stop)	46	56	2E	other printable
/	Slash or divide	47	57	2F	other printable
0	Zero	48	60	30	numeric
1	One	49	61	31	numeric
2	Тwo	50	62	32	numeric
3	Three	51	63	33	numeric
4	Four	52	64	34	numeric
5	Five	53	65	35	numeric
6	Six	54	66	36	numeric
7	Seven	55	67	37	numeric
8	Eight	56	70	38	numeric
9	Nine	57	71	39	numeric
:	Colon	58	72	3A	other printable
;	Semicolon	59	73	3B	other printable
<	Less than sign (open angled bracket)	60	74	3C	other printable

	ASCII Characters and subsets used in	SLOA ele	ements		
Symbol	Description	DEC	OCT	HEX	Subset
=	Equals sign	61	75	3D	other printable
>	Greater than sign (close angled bracket)	62	76	3E	other printable
?	Question mark	63	77	3F	other printable
@	"At" symbol	64	100	40	other printable
Δ	Unnercase A	65	101	41	alphabetic
		66	102	42	alphabetic
		00	102	42	alphabetic
		67	103	43	alphabetic
D	Uppercase D	68	104	44	alphabetic
E		69	105	45	alphabetic
F	Uppercase F	70	106	46	alphabetic
G	Uppercase G	/1	107	47	alphabetic
H	Uppercase H	/2	110	48	alphabetic
I		73	111	49	alphabetic
J	Uppercase J	/4	112	4A	alphabetic
ĸ	Uppercase K	75	113	4B	alphabetic
L	Uppercase L	76	114	40	alphabetic
M	Uppercase M	//	115	4D	alphabetic
N	Uppercase N	78	116	4E	alphabetic
0	Uppercase O	79	117	4F	alphabetic
P	Uppercase P	80	120	50	alphabetic
Q	Uppercase Q	81	121	51	alphabetic
R	Uppercase R	82	122	52	alphabetic
S	Uppercase S	83	123	53	alphabetic
T	Uppercase T	84	124	54	alphabetic
U	Uppercase U	85	125	55	alphabetic
V	Uppercase V	86	126	56	alphabetic
W	Uppercase W	87	127	57	alphabetic
X	Uppercase X	88	130	58	alphabetic
Y		89	131	59	alphabetic
Ζ	Uppercase Z	90	132	5A	alphabetic
	Open square bracket	91	133	5B	other printable
\	Backslash	92	134	5C	other printable
]	Close square bracket	93	135	5D	other printable
^	Circumflex (caret)	94	136	5E	other printable
_	Underscore	95	137	51	other printable
	Grave accent	96	140	60	other printable
а	Lowercase a	97	141	61	alphabetic
b	Lowercase D	98	142	62	alphabetic
C	Lowercase c	99	143	63	alphabetic
d	Lowercase d	100	144	64	alphabetic

ASCII Characters and subsets used in SLOA elements					
Symbol	Description	DEC	OCT	HEX	Subset
е	Lowercase e	101	145	65	alphabetic
f	Lowercase f	102	146	66	alphabetic
g	Lowercase g	103	147	67	alphabetic
h	Lowercase h	104	150	68	alphabetic
i	Lowercase i	105	151	69	alphabetic
j	Lowercase j	106	152	6A	alphabetic
k	Lowercase k	107	153	6B	alphabetic
I	Lowercase I	108	154	6C	alphabetic
m	Lowercase m	109	155	6D	alphabetic
n	Lowercase n	110	156	6E	alphabetic
0	Lowercase o	111	157	6F	alphabetic
р	Lowercase p	112	160	70	alphabetic
q	Lowercase q	113	161	71	alphabetic
r	Lowercase r	114	162	72	alphabetic
S	Lowercase s	115	163	73	alphabetic
t	Lowercase t	116	164	74	alphabetic
u	Lowercase u	117	165	75	alphabetic
V	Lowercase v	118	166	76	alphabetic
W	Lowercase w	119	167	77	alphabetic
х	Lowercase x	120	170	78	alphabetic
у	Lowercase y	121	171	79	alphabetic
Z	Lowercase z	122	172	7A	alphabetic
{	Opening brace	123	173	7B	other printable
	Vertical bar	124	174	7C	other printable
}	Closing brace	125	175	7D	other printable
~	Tilde (equivalency sign)	126	176	7E	other printable
	Delete	127	177	7F	not used