Enclosure E1 – Service Functional Hierarchy and Definitions for Statement of Need (SoN): Enterprise Business Systems - Convergence (EBS-C) Prototype
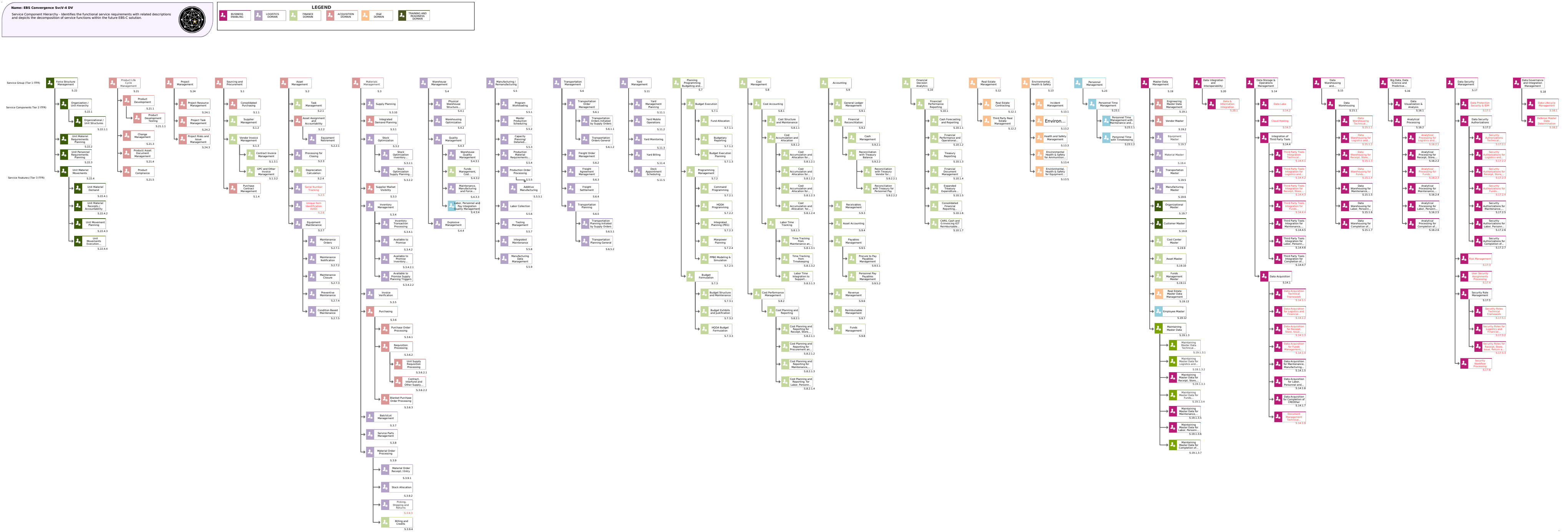
ENTERPRISE BUSINESS SYSTEMS CONVERGENCE

Notice ID: W519TC-23-R-EBSC

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7 November 2022

DISTRIBUTION STATEMENT A. Approved for public release.

EBS Convergence SvcV-4 DV (DoDAF 20 SvcV-4 Service Functional Hierarchy.

LEGEND

- BUSINESS ENABLING
- LOGISTICS DOMAIN
- FINANCE DOMAIN
- ACQUISITION DOMAIN
- II&E DOMAIN
- TRAINING AND READINESS DOMAIN

Service Group (Tier 1 (TF#))

Service Components (Tier 2 (TF#))

Service Features (Tier 3 (TF#))

A full-page service functional hierarchy chart depicting the decomposition of EBS-C service functions across multiple domains including Force Structure Management, Product Life Cycle Management, Project Management, Sourcing and Procurement, Asset Management, Materials Management, Warehouse Management, Manufacturing / Remanufacturing, Transportation Management, Yard Management, Planning Programming Budgeting and Execution, Cost Management, Accounting, Financial Decision Analytics, Real Estate Management, Environmental Health & Safety, Personnel Management, Master Data Management, Data Integration and Interoperability, Data Storage & Operations Management, Data Warehousing, Big Data Data Science and Predictive, Data Security Management, and Data Governance and Integration Management.

Identifier	Name	Description
S.1	Sourcing and Procurement	Involves planning, purchasing and inventory management. Sourcing is part of the bigger procurement process
S.1.1	Consolidated Purchasing	Ability to consolidate multiple requisitions for the same entity (business unit, department…) onto a single purchase order and line item for a specified time frame. More efficient and supports quantity cost breaks. This is most frequently used when Material Requirements Planning (MRP) is used.
S.1.2	Supplier Management	Collaborate directly with suppliers to reduce administrative leads times. Allow the supplier visibility of material plans in order to prepare, execute material deliveries and invoicing with less formal 'paperwork' and hands on non-value added effort. Includes the ability to measure supplier performance.
S.1.3	Vendor Invoice Management	The direct link to accounts payable, this is the ability to accept invoices and validate that they are correct (same as quantity received, same price as planned). Commonly called a 3 way match. Intent being to automate this process as much as possible while retaining necessary controls.
S.1.3.1	Contract Invoice Management	Faciliates contract invoice acceptance, validation and processing.
S.1.3.2	GPC and Other Invoice Management	Facilitates GPC and Other invoice accepetance, validation and processing.
S.1.4	Purchase Contract Management	Commits the organization to buying a specified quantity of goods or services over a period of time. Not used in all situations (local purchase, impact card), when it is used the contract is created and maintained in a separate system and integrated to the purchase order.
S.10	Financial Decision Analytics	providing the ability to analyze the organization's financial statements and financial data for decision making purposes.
S.10.1	Financial/ Performance Reporting	allows an organization to measure how efficiently assets are used and describes the health of the business
S.10.1.1	Cash Forecasting and Reporting	allows the organization to prepare cash flow projections and develop reports
S.10.1.2	Financial Performance and Operational Reporting	allows for traceability back to the general ledger transactions and measures overall performance of programs
S.10.1.3	Treasury Reporting	supports the organization in audit readiness and efforts to implement standard internal controls and measures of compliance
S.10.1.4	Financial Document Management	provides key supporting documentation for audit readiness
S.10.1.5	Expanded Treasury Expenditure Reporting	Facilitates reconcilation of expenditure reporting with Trearury.
S.10.1.6	Consolidated Financial Reporting Foundations	Supports departmental financial reporting consolidation and the foundation of funds management reporting.
S.10.1.7	CARS, Cash and G-Invoicing IGT Reimbursable Reporting	Enables Treasury Cash Accounting and Reporting System (CARS), Cash, G-Invoicing and Intergovernmental (IGT) Reimbursable Reporting
S.11	Yard Management	enables the organization to direct inbound and outbound vehicles and trucks, personnel, shipments, pallets and other items on Army sites.
S.11.1	Yard Management Planning	Provides the ability to plan the flow of containers and material though a temporary staging / transfer point while maintaining the original transportation plans / timing Includes import / export actions as required.
S.11.2	Yard Mobile Operations	Utilizes a suite of mobility capabilities: fixed and mobile RF, bar code, data matrix, sensor reading / transmission capabilities, etc. to maintain full visibility of shipments / containers for security, import/export control, cross docking and forwarding.
S.11.3	Yard Monitoring	Provides, with mobile operations, full situational awareness of shipments in order for dispatchers / supervisors to schedule down stream actions and to immediately react to adverse situations.
S.11.4	Yard Billing	Provides the ability to directly (single payer) or through allocation to each transportation order the labor, overhead and materials consumed when handling shipments in the yard / cross docking site / staging area.
S.11.5	Dock Appointment Scheduling	Ability to schedule ground (truck, rail), sea and air arrivals and departures to maintain delivery schedules, avoid congestion without exceeding yard / dock capacity
S.12	Real Estate Management	supports all phases of the life cycle of real estate assets to include acquisition, accounting, reporting and property and technical management.
S.12.1	Real Estate Contracting	The ability to establish contacts for rental / lease space establishing the billing rates / calculations with exclusions (janitorial services, supplies) and inclusions (utilities based on sq ft, security, etc.).
S.12.2	Third Party Real Estate Management	provides the ability to include real estate you are the lessor of in order to manage liabilities and payments per contracts.
S.13	Environmental, Health & Safety	refers to laws, rules, regulations, professions, programs, and workplace efforts to protect the health and safety of personnel and the public as well as the environment from hazards associated with the workplace
S.13.1	Incident Management	Records the lifecycle of an accident, spill, out of compliance event, etc. From it's initial reporting though investigation, mitigation, costs, personnel (including contractor), materials used and outcome. Outcomes can result in full closure, governmental reporting, fines, follow-on actions, etc. Not typically used for major environmental liabilities / cleanup that require extensive project level action.
S.13.2	Environmental Management	Is a comprehensive set of tasks to maintain environmental compliance: documentation, record keeping, training, auditing, inspections / testing, waste steam monitoring, etc. Includes environmental incident management.

S.13.3	Health and Safety Management	Is a comprehensive set of tasks to maintain occupational safety and health (OSHA) compliance: documentation, record keeping, training, auditing, inspections / testing, exposures to hazardous materials, safety equipment, etc. Includes safety and health incident management.
S.13.4	Environmental Health & Safety for Ammunition and Other Inventory Management	Enables EH&S for Ammunition and Other Materials in Inventory
S.13.5	Environmental, Health & Safety for Equipment and Property Management	Enables EH&S for Equipment, Physical Plants, Real Property and Land Tracts
S.14	Data Storage & Operations Management	enables an organization to consolidate, protect, manage, access and recover stored data
S.14.1	Data Acquisition	Facilitates the consumption of data required to enable transactional and analytics processes.
S.14.1.1	Data Acquisition Technical Framework	Facilitates the technical framework for data acquisition to enable transactional and analytics processes.
S.14.1.2	Data Acquisition for Logistics and Financial Consolidated Reporting	Facilitates the consumption of data required to enable the technical framework for logistics and financial reporting transactional and analytics processes.
S.14.1.3	Data Acquisition for Receipt, Store, Issue, Return and Distribution (including Cost Management)	Facilitates the consumption of data required to enable receipt, store, issue, return and distribution transactional and analytics processes.
S.14.1.4	Data Acquisition for Funds Management, Procurement and Sales (including Cost Management)	Facilitates the consumption of data required to enable funds management, cost management, procurement and sales transactional and analytics processes.
S.14.1.5	Data Acquisition for Maintenance, Manufacturing and Force Management Enablers (including Cost Management)	Facilitates the consumption of data required to enable maintenance, manufacturing and force management transactional and analytics processes.
S.14.1.6	Data Acquisition for Labor, Personnel and Pay Integration	Facilitates the consumption of data required to enable personnel and pay transactional and analytics processes.
S.14.1.7	Data Acquisition for Completion of CM/Other	Facilitates the consumption of data required to enable the completion of transactional and analytics processes.
S.14.1.8	Document Management Technical Framework	Facilitates the technical framework and tools for document management integration with various transactional processes and aligned to Build 0
S.14.2	Data Lake	Used as a central repository to hold varied sets of raw data to keep an unrefined view of your data. Structured and unstructured data available for data modeling, analysis and visualization.
S.14.3	Cloud Hosting	Alternative to on premise / local data centers, web hosting allows you to more efficiently balance the load, maximize uptime and spread your data across multiple interconnected servers
S.14.4	Integration of Third Party Tools	the tools allow an organization to add necessary external data sources via API (Application Program Interface)
S.14.4.1	Third Party Tools Integration Technical Framework	Facilitates the technical framework for third party tools integration to enable transactional and analytics processes.
S.14.4.2	Third Party Tools Integration for Logistics and Financial Conslidated Reporting	Facilitates the third party tools integration required to enable the functional framework for logistics and financial reporting transactional and analytics processes.
S.14.4.3	Third Party Tools Integration for Receipt, Store, Issue, Return and Distribution	Facilitates the third party tools integration required to enable receipt, store, issue, return and distribution transactional and analytics processes.
S.14.4.4	Third Party Tools Integration for Funds Management, Cost Management, Procurement and Sales	Facilitates the third party tools integration required to enable funds management, cost management, procurement and sales transactional and analytics processes.
S.14.4.5	Third Party Tools Integration for Maintenance, Manufacturing and Force Management Enablers	Facilitates the third party tools integration required to enable maintenance, manufacturing and force management transactional and analytics processes.
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S.14.4.7	Third Party Tools Integration for Completion of CM/Other	Facilitates the third party tools integration required to enable personnel and pay transactional and analytics processes.
S.15	Data Warehousing and Business Intelligence	Provides a data management system that supports business intelligence activities and performs queries and analysis of historical data
S.15.1	Data Warehousing	Provides a data management system that supports business intelligence activities and performs queries and analysis of historical data.
S.15.1.1	Data Warehousing Technical Framework	Provides the infrastructure, technical tools and architecture / standards that support the accurate and secure Extract, Transformation and Load (ETL) from source systems. Provides for analytical / predictive based data modeling, advanced coding, data science and visualization tools producing outputs (reports, analytics, dashboards, etc.)

S.15.1.2	Data Warehousing for Logistics and Financial Consolidated Reporting	Facilitates the data warehouse management required to enable the functional framework for logistics and financial reporting transactional and analytics processes.
S.15.1.3	Data Warehousing for Receipt, Store, Issue, Return and Distribution	Facilitates data warehouse management as required to enable receipt, store, issue, return and distribution transactional and analytics processes.
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S.16	Big Data, Data Science and Predictive Analysis	Big Data deals with cleansing and interpretation of vast amounts of information and it can be used in a broad area of business activities. Predictive analytics is a method of forecasting business events and market behavior
S.16.1	Data Visualization & Analysis	Provides techniques to communicate data or information by encoding it as visual objects contained in graphical formats and conduct data analysis.
S.16.2	Analytical Processing	Enables users to conduct multidimensional analysis of data.
S.16.2.1	Analytical Processing for Logistics and Financial Consolidated Reporting	Facilitates the analytical processing to support logistics and financial reporting transactional processes.
S.16.2.2	Analytical Processing for Receipt, Store, Issue, Return and Distribution	Facilitates the analytical processing to support receipt, store, issue, return and distribution transactional processes.
S.16.2.3	Analytical Processing for Funds Management, Cost Management, Procurement and Sales	Facilitates the analytical processing to support funds management, cost management, procurement and sales transactional processes.
S.16.2.4	Analytical Processing for Maintenance, Manufacturing and Force Management Enablers	Facilitates the analytical processing to support maintenance, manufacturing and force management transactional processes.
S.16.2.5	Analytical Processing for Labor, Personnel and Pay Integration	Facilitates the analytical processing to support personnel and pay transactional processes.
S.16.2.6	Analytical Processing for Completion of CM/Other	Facilitates the analytical processing to support the completion of all transactional processes.
S.17	Data Security Management	provides effective oversight and management over the organizations data to ensure it is not corrupted or accessed by unauthorized users.
S.17.1	Data Protection Security & IDM	Protects files, databases and accounts/identities on a network by adopting a set of controls, applications and techniques that identify the relative importance of different datasets, their sensitivity, regulatory compliance requirements and then applying appropriate protections to secure those resources.
S.17.2	Data Security Authorizations	Provides a comprehensive ability to label / tab data and establish extended security roles that restrict transacting, displaying and reporting / extracting data based on security and need to know requirements.
S.17.2.1	Security Authorizations Technical Framework	Facilitates the technical framework for security authorizationst to enable transactional and analytics processes.
S.17.2.2	Security Authorizations for Logistics and Financial Consolidated Reporting	Facilitates security authorizations to support logistics and financial reporting transactional and data analytical processes.
S.17.2.3	Security Authorizations for Receipt, Store, Issue, Return and Distribution	Facilitates security authorizations to support receipt, store, issue, return and distribution transactional and data analytical processes.
S.17.2.4	Security Authorizations for Funds Management, Cost Management, Procurement and Sales	Facilitates security authorizations to support enable funds management, cost management, procurement and sales transactional and data analytical processes.
S.17.2.5	Security Authorizations for Maintenance, Manufacturing and Force Management Enablers	Facilitates security authorizations to support maintenance, manufacturing and force management transactional and data analyitical processes.
S.17.2.6	Security Authorizations for Labor, Personnel and Pay Integration	Facilitates security authroizations to support personel and pay integration transactional and data analytical processes.
S.17.2.7	Security Authorizations for Completion of CM/Other	Facilitates security authorizations to support the completion of all transactional and data analytical processes.
S.17.3	Risk Management	allows the organization to identify, evaluate and prioritize risks to the organization.

S.17.4	User Security Assignments Processing	Provides the ability to assign one or more Security Roles and Security data authorizations (if used) to individuals. Typically includes approval workflows and GRC validation.
S.17.5	Security Role Management	Security roles define the system transactions and data (typically plant level) that someone with this set of roles is allowed to perform within the system.
S.17.5.1	Security Roles Technical Framework	Facilitates the technical framework for security roles management to enable transactional and analytics processes.
S.17.5.2	Security Roles for Logistics and Financial Consolidated Reporting	Facilitates the security roles management required to enable the functional framework for logistics and financial reporting transactional and analytics processes.
S.17.5.3	Security Roles for Receipt, Store, Issue, Return and Distribution	Facilitates security roles management as required to enable receipt, store, issue, return and distribution transactional and analytics processes.
S.17.6	Security Workflow Processing	This workflow allows managers and access security personnel the ability to insure that the role being developed complies with policy and regulation before allowing it to be assigned to any individuals.
S.18	Data Governance and Integration Management	Supports ensuring that system data (master and transactional) is VAUTIS (Visible, Accessible, Understandable, Trusted, Interoperable, Secure) across its lifecycle including: At Introduction - processes and technologies that ensure only quality data is introduced into the system / enterprise when created or maintained. At Rest - verifying and correcting data based on profiles / rules as it resides in the system / enterprise. In Motion - ensuring the quality of data being consumed by or provided to other analytical of transactional systems.
S.18.1	Data Lifecycle Management	Provides a policy-based approach to managing the flow of an information system's data throughout it's lifecycle from creation and initial storage to the time when it becomes obsolete and deleted.
S.18.2	Defense Master Data Determination	Identifies the authoritative data source for master data (materials, customers, vendors, equipment, etc.) with the intent to syndicate (publish) that data to other systems that contain that master data ensuring consistent information across the enterprise.
S.19	Master Data Management	Consolidates, cleans and strengthens the organization's master data within the entire system.
S.19.1	Engineering Master Data Management	Processes to develope, maintain and securely distribute the information that is relevant to developing / producing and maintaining a product or material. CAM Models, structural analysis / specifications, e-BOMS / parts lists, production requirements, technical and maintenance manuals (digital). Sources can be organic or from OEMs. (also known as Product Master Data)
S.19.1.3	Maintaining Master Data	Ensures that when new master and reference data is added to the system or is modified that is aligns with the enterpise rules for data integrity and quality established by the enterprise. Level of involvement varies depending on the master data object. Thje material master being one the requires extensive conrol andf monitoring. Customer, vendors, equipment are others.
S.19.1.3.1	Maintaining Master Data Technical Framework	Facilitates the technical framework for master data management to enable transactional and analytics processes.
S.19.1.3.2	Maintaining Master Data for Logistics and Financial Consolidated Reporting	Facilitates the master data management required to enable the functional framework for logistics and financial reporting transactional and analytics processes.
S.19.1.3.3	Maintaining Master Data for Receipt, Store, Issue, Return and Distribution	
S.19.1.3.4	Maintaining Master Data for Funds Management, Cost Management, Procurement and Sales	Facilitates master data management as required to enable funds management, cost management, procurement and sales transactional and analytics processes.
S.19.1.3.5	Maintaining Master Data for Maintenance, Manufacturing and Force Management Enablers	Facilitates master data management as required to enable maintenance, manufacturing and force management transactional and analytics processes.
S.19.1.3.6	Maintaining Master Data for Labor, Personnel and Pay Integration	Facilitates master data management as required to enable personnel and pay transactional and analytics processes.
S.19.1.3.7	Maintaining Master Data for Completion of CM/Other	Facilitates master data management required to enable the completion of transactional and analytics processes.
S.19.10	Asset Master	Stores basic data relating to various fixed and tangible assets
S.19.11	Funds Management Master	creates a validity period for an organization to post transactions and track spending and revenue.
S.19.12	Employee Master	Data curated and used to track personnel for payroll, reimbursable expenses, etc. within the Army Enterprise
S.19.13	Real Estate Master Data Management	Maintains the information that defines real estate hierarchies (Installation, facilities, office space, work space, etc.). Square footage, acreage, linear miles, usage (internal, lease), etc.
S.19.2	Vendor Master	creates a repository for strategic data around suppliers
S.19.3	Equipment Master	The equipment master is a repository of the standard information related to a specific piece of equipment.

S.19.4	Material Master	Provides the ability to add, chance and delete information on all materials / items that an enterprise procures or produces, stores, sells, utilizes* or consumes. It is the enterprises central source for retrieving material-specific data referenced for all material transactions. * Army has situation (mainly class VII) where equipment has both equipment masters and material master records. For Army this function needs to be incorporated into conditional and integrated workflow with Master Data Management technology that supports the many different application uses of the material master.
S.19.5	Transportation Master	Provides specific information regarding carriers,rating, routes, tendering, etc.
S.19.6	Manufacturing Master	Provides the production version, material type, quantities, rate routing and planning requirements for manufacturing.
S.19.7	Organizational Master	Data collected to track units, commands, departments, etc. within the Army Enterprise.
S.19.8	Customer Master	creates a collection of data in order to conduct business relationships with customers.
S.19.9	Cost Center Master	allows an organization to monitor and track costs and assign to a location.
S.2	Asset Management	It may apply both to tangible assets and intangible assets and refers to a systematic approach to the governance and realization of value from the things that the organization is responsible for the entire lifecycle.
S.2.1	Task Management	Automated tracking and standardizing sequence of work for maintenance
S.2.2	Asset Assignment and Accountability	Provides financial and locational responsibility. Records who (what Army organization structure / unit) has ownership and / or possession of an asset. (Example: AMC owner in possession of contractor) and condition of an asset (Serviceable, unserviceable, etc.)
S.2.2.1	Equipment Retirement	Provides the ability to remove/retire a piece of equipment from the asset portfolio. Asset can be sold or scrapped.
S.2.3	Processing for Closing	Automated and manual tasks that are carried out during period-end closing or year-end closing in Asset Accounting. In addition, there are certain tasks that are required for special valuation of assets.
S.2.4	Depreciation Calculation	Using rules assigned on the asset master this automates different types of depreciation to include ordinary depreciation special depreciation, unplanned depreciation, transfer of reserves/reduction of APC
S.2.5	Serial Number Tracking	Distinguishes one item from other items that DOD buys or owns/ Serialized item management. Typically SNs are assigned by the OEM/ equipment produced when the equipment is produced. They track the item through out its life as it moves across organizations through overhaul, changes conditions, etc. Warrantees are typically assigned to serial numbers.
S.2.6	Unique Item Identification (IUID)	Similar to serial number tracking Unique Item Identification (IUID) is a DoD required identification (unique identifier - UII) that is physically marked on the equipment and major components for lifetime configuration management and accountability. IUID data is registered in a centralized repository and updated as changes occur. Items not requiring serial numbers may still require UII.
S.2.7	Equipment Maintenance	Allows an enterprise view and traceability into all equipment details, including depreciation, warranty, usage history, maintenance costs, billing rates, etc.
S.2.7.1	Maintenance Orders	Are used to schedule, status, collect costs (labor, material, contractor), parts usage and failure analysis reasons for a repair, preventative maintenance or inspection. Labor, contractor and material transactions produce financial transactions.
S.2.7.2	Maintenance Notification	A maintenance notification is input into the maintenance system to alert the department responsible for scheduling technicians that a breakdown, preventative maintenance or inspection action is required. It describes as much about what is needed as available. It becomes the source for maintenance orders once validated and assigned to a technician(s). Notifications can be automatic as in the case of preventative maintenance, called / e-mailed to a central dispatch, or created automatically from on-board equipment sensors (CBM)
S.2.7.3	Maintenance Closure	When the maintenance work is complete all open materials are received or canceled, all relevant labor reported and the work/maintenance order is closed. This results in settlement of all financial information.
S.2.7.4	Preventive Maintenance	Services supporting the systematic inspection, detection, and correction of incipient failures either before they occur or before they develop into major defects for facilities, equipment and materials
S.2.7.5	Condition Based Maintenance	Condition-based maintenance (CBM) is a maintenance strategy that monitors the actual condition of an asset to decide what maintenance needs to be done.
S.20	Data Integration and Interoperability	allows the consolidation of data into consistent forms and the ability for systems to communicate with each other.
S.20.1	Data & Information Integration	Enables consolidation of data from disparate sources into a single dataset to meet the information needs of an organization.
S.21	Product Life Cycle Management	manages the journey of a product from inception to development, service, retirement and disposal.
S.21.1	Product Development	Enables the organization to develop high quality, connected, compliant and sustainable products and reduce time to delivery. Allows the organization to handle the complexity of increasing production variations and drive efficiency in design and development
S.21.1.1	Product Development Testing	Used for testing of new products. Capabilities include: checking test cases coverage, create and manage test artifacts, plan and execute tests against product requirements, and analyze test results to stay connected with product development
S.21.3	Change Management	Processes and tools that when an engineering change is required provide the ability to distribute controlled revision updates to the relevant master data, distribute and to manage the physical configuration changes required.
S.21.4	Product/ Asset Document Management	to store, track, control and organize electronic documents, to ensure they are accessible by authorized parties when required.

S.21.5	Product Compliance	enables the ability to create compliance documents, classify products and manage regulatory and sustainability requirements, as well as package transport and store hazardous materials with accurate labeling.
S.22	Force Structure Management	Provides the Army Enterprise the organizational structure to execute activities based on the mission. It establishes, maintains and fields mission ready Army organizations.
S.22.1	Organization / Unit Hierarchy	enables the creation of relationships that are important to the operational structure of an organization such as consolidated reporting. It is developed at an enterprise level, command level, etc.
S.22.1.1	Organizational / Unit Structures	provides the ability for organizational elements of armed forces, police and aid organization to map in the system as force elements, as well as positions and persons, can be included in different organizational structures
S.22.2	Unit Materiel Requirements Planning	Determine the funding, sources, priorities and lead times necessary to satisfy unit materiel (equipment, material, supplies) demand.
S.22.3	Unit Personnel Requirements Planning	Determine the personnel (rank, skill, etc.) and training required for the unit to achieve it's authorized personnel quantity and skill level target and or readiness goal.
S.22.4	Unit Materiel Movements	Receipt, return, transfer, physical inventory of materiel (equipment, material, supplies) for or between defined units.
S.22.4.1	Unit Materiel Demand	Compute the materiel (equipment, material, supplies) required (demand) for units to achieve their authorized materiel target and/or readiness goal.
S.22.4.2	Unit Materiel Receipts / Accountability	Receipt of materiel into the units inventory and, as required, property book for asset accountability.
S.22.4.3	Unit Movement Planning	Plans required to transport a complete or partial unit to another location, CONUS or OCONUS, based on mission parameters / orders. Includes personnel and materiel (as required).
S.22.4.4	Unit Movements Execution (deploy / redeploy)	Preparation, staging, loading, transport, unloading and reception of a complete or partial unit to another location, CONUS or OCONUS, based on mission parameters / orders. Includes personnel and materiel (as required).
S.23	Personnel Management	Provides the ability to manage the entire employment lifecycle at the individual and organization level. Recruiting, hiring, career development, training / certifications, work assignments, department / cost center assignments (org structure), compensation / earnings, taxes, benefits administration, retirement, etc. Includes support for manpower planning, budgeting, and integrated business planning. A subset of personnel data is utilized by the logistics and finance functions for workforce management, force element, time and attendance, certifications, budgeting and cost management.
S.23.1	Personnel Time Management	Provides support in performing human resources / payroll processes involving the planning, recording, and valuation of internal and external employees' work performed (direct), administrative (indirect) and absence times. Supports gross payroll earnings and financial distributions (AWCF). It provides applications with planning data and for determining labor costs for maintenance, production and projects as well as creating invoices.
S.23.1.1	Personnel Time Management with Maintenance and Manufacturing Labor Confirmation	Enables time management associated with maintenance and manufacturing business processes where labor confirmations capture time.
S.23.1.2	Personnel Time with Timekeeping	Enables personnel time management associated with timekeeping.
S.24	Project Management	Facilitates the planning, scheduling, and controlling projects and their integration with wide-spanning business processes executed by the organization, including acquisition, production, events, campaigns and reimbursable activities amongst others. Supports project resource, tasks, performance objectives, and risks and issues management
S.24.1	Project Resource Management	Enables the allocation of budget, personnel and other organizational resources to projects, work breakdown structure tasks, task groups, work packages, networks and business processes, including those integrated with other organizational processes (e.g., acquisition, production, events, campaigns and reimbursable execution). Facilitates secondary allocation of those associated costs to budget addresses, activities, assets and organizational elements. Facilitates the definition and automation of settlement rules. Enables visibility into and managerial controls on resource planning and execution
S.24.2	Project Task Management	Defines an overall work effort and/or deliverable within a work breakdown structure (Individual tasks) with a planned schedule, resources involved, materials, services with estimated costs. Captures actual labor, service, material costs and start/completions. Provides status, general and exception reporting that supports managing the overall project and individual tasks, risks and issues.
S.24.3	Project Risks and Issue Management	Enables the definition of project risks, their probability of occurrence and their severity of impact. Facilitates the association of risks to tasks, deliverables and schedules, resource consumption and performance objective impacts, including the definition and monitoring of risk mitigation actions. Also facilitates the identification of realized risks or issues, their impacts, impact mitigation actions and their results.
S.3	Materials Management	provides the organization a method to plan, organize and control activities that are related to the flow of materials across the enterprise.

S.3.1	Integrated Demand Planning	allows organizations to align demand and supply plans with executive financial targets and key performance indicators. It also enables the development of demand forecasts based on historical demand patterns and other benchmark data, allowing for differentiation by customer, organization type and geography. Facilitates the application of varied forecasting models to account for trend, seasonality, cyclical and episodic influences. Supports what-if and event-driven forecasts.
S.3.10	Supply Planning	Facilitates supply requirements analysis, including dependent demand planning. Factors inventory availability, forecasted usage, spoilage and loss, supplier sources' capacities and constraints, supply and production lead-times, resource availability, transportation/ distribution and intermediate storage capacities in planning for supply ordering and internal production. Enables production and sourcing planning and decision-making with heuristics, regressions, constrained optimization modeling and AI/ML-driven analytics.
S.3.2	Stock Optimization	allows an organization to achieve stock availability while reducing inventory costs and minimizing the risk of excess items. It utilizes inventory control technique effectively.
S.3.2.1	Stock Optimization Inventory Triggers	Enables Stock Optimization Inventory triggers and process touchpoints.
S.3.2.2	Stock Optimization Supply Planning Triggers	Enables Stock Optimization supply planning triggers and process touchpoints.
S.3.3	Supplier Market Visibility	allows suppliers to view their customers (usually production) schedules and plans for the material the supplier provides and to ensure that their deliveries align with that schedule. Often includes payment on receipt or integrated invoicing techniques.
S.3.4	Inventory Management	enables the organization to track the inventory in and out of the warehouse and provides the levels and location of all the inventory at any given time.
S.3.4.1	Inventory Transaction Processing	Covers a spectrum of inventory events and their associated financial transactions at a primary (Plant) and/or secondary location (supply location, warehouse): Receipts from purchase or production orders. Issues to sales orders, production orders, work / maintenance orders, internal moves. adjustments from physical inventory or cycle counting, Initial inventory load.
S.3.4.2	Available to Promise	Provides the ability to determine if and where there is sufficient inventory to satisfy a demand (sales order, production order, work order) including when it can be delivered. When applicable it can include procurement, production and repair/overhaul lead times.
S.3.4.2.1	Available to Promise Inventory Triggers	Enables Available to Promise Inventory triggers and process touchpoints.
S.3.4.2.2	Available to Promise Supply Planning Triggers	Enables Available to Promise supply planning triggers and process touchpoints.
S.3.5	Invoice Verification	Provides the ability to determine if the Army is being billed only for what they received. Typically a three way match (Purchase Order, Packing Slip, Invoice) or four way with the addition of requisition. Is a required step prior to authorizing vendor payment.
S.3.6	Purchasing	market exploration to procure goods and services of desired quality, quantity, lowest price at the desired time.
S.3.6.1	Purchase Order Processing	A purchase order serves as the agreement between the enterprise and a vendor /supplier for materials or services including quantities, delivery dates / schedules, prices, delivery address, special instructions, specifications, etc. In the case of the Army there is also often a contract in place in separate acquisition system. As materials and services are received the purchase order is updated and invoicing and payments occur. There can also be returns and credits / adjustments. For the Army EDI (Electronic Data Interchange) transactions and ETF (Electronic Funds Transfer) are often used instead of physical documents. Purchase order, changes, releases, acknowledgements, payments, etc.
S.3.6.2	Requisition Processing	Purchase requisitions allow tracking of what has been ordered and from whom. It serves as a check for invoices that need to be paid and can procure materials for direct consumption or for stock or services.
S.3.6.2.1	Unit Supply Requisition Processing	Unit supply requisitions enable ordering materals in local inventories without any budgetary impacts.
S.3.6.2.2	Contract, Interfund and Other Supply Requisition Processing	Contact, interfund and other supply requsitions enable ordering materials from commercial or intergovernmental suppliers and incur budgetary impacts.
S.3.6.3	Blanket Purchase Order Processing	establish a long term agreement with a vendor to procure quantities of materials or services over time usually at a prescribed price. Purchase releases and/or delivery schedules are used to determine actual quantities to be shipped and when.
S.3.7	Batch/Lot Management	Allows for tight control, tracking and assigning lot identification numbers for batches of items in inventory. Normally used for sub-sets of a specific material that are produced or managed as a group: Ammo lots, pharma, chemicals, heat numbers, etc. Supports shelf Life. Army ERP use Batch/lot management for condition / owner / purpose codes.
S.3.8	Service Parts Management	Ability to determine the quantity, budget, timing and distribution for spares parts required for a fleet or similar grouping of equipment (Trucks, Helicopters, Tanks, etc.). Typically requires predictive analytics.
S.3.9	Material Order Processing	Process of managing customer master data and accepting and processing (reservations, shipping, billing) products / items ordered and shipped to a customer.
S.3.9.1	Material Order Receipt / Entry	Receipt of a request from a customer to provide / ship products / items to a specific location by a defined date and time.
S.3.9.2	Stock Allocation	Determine if and where (warehouse) the quantity requested on a sales order for a product / item is located. Reserve the quantity of the item and backorder for procure or make if not available.
S.3.9.3	Picking, Shipping and Returns	Pick the quantity of the product / item from the source location and ship to the location defined on the sales order. Customer returns are accepted against the original sales order.
S.3.9.4	Billing and Credits	Bill the customer against the sales order for the products / items shipped. Provide credits for a products / items returned.

S.4	Warehouse Management	Organizing and controlling all aspects to include processes of operations and storage of products located across all warehouses.
S.4.1	Physical Warehouse Structure Management	Managing the physical / virtual structure of the warehouse (high rack, bulk, and picking storage area, row, bin, shelf / project, restricted inventory) for optimal put away and pick operations and space utilization.
S.4.2	Warehousing Optimization	Utilizes advanced warehousing techniques (wave picking, robotics, voice, light, picking, mobile/wearable devices, conveyors, travel distance,etc. and workforce scheduling to optimize picking and put away efforts.
S.4.3	Quality Management	Address inefficient processes or aid in diagnosing a specific problem and improve warehouse efficiency. Final shipment inspection and/or embedded measures used to achieve perfect order fulfillment. Right materials, right quantities, right condition, right price, right time, right paper work.
S.4.3.1	Warehouse Quality Management	Facilitates quality management sub-processes to support receipt, store, issue, return and distribution transactional processes.
S.4.3.2	Funds Management, Cost Management, Procurement and Sales Quality Management	Facilitates quality management sub-processes to support funds management, cost management, procurement and sales transactional processes.
S.4.3.3	Maintenance, Manufacturing and Force Management Enablers Quality Management	Facilitates quality management sub-processes to support maintenance, manufacturing and force management transactional processes
S.4.3.4	Labor, Personnel and Pay Integration Quality Management	Facilitates quality management sub-processes to support personel and pay integration transactional processes.
S.4.4	Explosive Management	Tracks the explosive material, supports safe storage and movement of ammunition in the explosive storage location
S.5	Manufacturing / Remanufacturing	Make, produce or fabricate products to support Army missions or the rebuilding of a product to specifications of the original manufactured product using a combination of reused, repaired and new parts
S.5.1	Program Workloading	Assigns a funded work effort and/or deliverable (end items, spare parts, depot level repair, etc.) to a performing entity (organic or inorganic) with associated contracts, MIPRs, agreements, etc. Often managed by project task management.
S.5.2	Master Production Scheduling	Provides a method of establishing the dates required to finish and start production orders based on required completion dates, manufacturing and procurement leads time, work center capacity and constraints. Planning covers multiple times fences / periods of time with firmer plans in those periods closer to execution. Allows for user intervention where required to address problems / constraints. An output of MPS is a scheduled production order created from the items manufacturing bill of material (MBOM) and routing. It includes all the materials, operations / tasks and the work centers where the work is performed to produce the required quantity of items.
S.5.3	Capacity Planning/ Detailed Scheduling	A detailed scheduling function used for the actual period / time fence during production execution. These scheduling methods address known constraints (capacity, material, work force) in order to optimize the rate of production and meet production completion requirements. It covers a range of production and planning techniques that can be utilized depending upon the environment. Forward scheduling, backward scheduling, rough cut, finite scheduling, infinite scheduling, Just-in-Time / Pull / Kanban operations, Theory of Constraints etc.
S.5.4	Production Material Requirements Planning	allows for a more detailed schedule to assess the needs of manufactured goods based on forecasts and demand.
S.5.5	Production Order Processing	Unique to REMAN this set of operations / tasks are required to determine exactly what overhaul / repair work is going to be required, what materials can be reused and what new materials will be needed. Downstream operations or productions orders and materials needed may require adjustments due to the results.
S.5.5.1	Additive Manufacturing	Traditional multi-operation manufacturing (mold / press, finish) often require set up time, special tooling, machine tools, long run times and minimum quantiles. This makes quick response at a reasonable cost prohibitive. Additive manufacturing, using 3D printing, is applicable in many situations especially, but not only, where smaller quantities of components / items need to be produced quickly. This uses 3D CAD Models (available from PDM/OEM or reverse engineered) and an appropriate printing material.
S.5.6	Labor Collection	provides more timely and accurate information for distributed labor time and material transactions
S.5.7	Tooling Management	Tooling (jigs, fixtures, cutting tools, gauges, etc.) are expensive, often long lead time resources that are required to perform a specific production operation. Tools can have a maintenance life (number of uses between maintenance) and a useful file (number of maintenance / uses until disposal). Multiple operations and work centers can require the same tool (potential conflicts). A Tool management function manages the inventory, reservations, procurement, maintenance, issuing and return acceptance of tooling (library style function). As a potential production constraint a Tooling Management system integrates with the production scheduling function to identify conflicts and to generate reservations for tooling.
S.5.8	Integrated Maintenance	Integrated Maintenance is a function to ensure that production equipment and related are available for their intended use. Machines tools, material handling equipment, etc. This includes emergency, breakdown, preventative and predictive maintenance. The function includes equipment data management, preventative maintenance scheduling, breakdown notifications, repair technician scheduling, work order dispatch, material requesting and use, labor tracking, failure reason recording, equipment usage tracking and analysis. As a potential production constraint (equipment down for maintenance) the Plant Maintenance system integrates with the production scheduling function to identify conflicts and to adjust schedules. NOTE: This function is basically the same as Equipment Management without the integration for production scheduling.

S.5.9	Manufacturing Data Management	The ability to collect, store, analyze and report on the large amounts of manufacturing data.
S.6	Transportation Management	helps organizations with planning, executing and optimizing the physical movements of goods to include incoming and outgoing.
S.6.1	Transportation Order Management	Contains the information required to determine ship from, ship to parties, pick up / delivery address, pick up and delivery times, Items being shipped, weights, dimensions, special handling / hazardous conditions, etc.
S.6.1.1	Transportation Orders Initiated by Supply Orders	Initiates transportation orders flowing from supply orders.
S.6.1.2	Transportation Orders General	Initiates and manags all transportation orders.
S.6.2	Freight Order Management	Manage the freight company / forwarder from acceptance of tender / estimate though pickup, routing, in-transit visibility, delivery, base rates and surcharges. Inclusive of required paperwork (CBOL, GBOL, Export documentation, manifest). Would impact transportations funds management.
S.6.3	Freight Agreement Management	Includes negotiating freight agreements in advance for an extended time period, with defined rates and service levels. Includes EDI integration to minimize administrative lead times. Provides better rates and avoids the longer lead times of spot frieght shipping.
S.6.4	Freight Settlement	Reconciles freight bills with transportation execution. Inclusive of delivery confirmation, claims, penalties, sur-charges, credits, etc.
S.6.5	Transportation Planning	Helps to plan, execute, and optimize the physical movement of goods (incoming and outgoing) ensuring compliance and proper documentation is available. Advanced methods incorporating AI to analyze the transportation time frame for shipments and determine the optimal transportation method (ground, sea, air) individually and together, transportation routes and carriers to meet the desired delivery dates within cost and customer service parameters.
S.6.5.1	Transportation Planning Initiated by Supply Orders	Initiates transportation planning flowing from supply orders.
S.6.5.2	Transportation Planning General	Facilitates transportation planning for all physical goods movements initiated by all process triggers.
S.7	Planning Programming Budgeting and Execution	annual process serves as the framework for DOD civilian and military leaders to decide which programs and force structure requirements to fund based on strategic objectives
S.7.1	Budget Execution	allows the organization to develop and record multiple budgets across department, command and enterprise levels. It allows for implementing, monitoring and reporting the current year's budget
S.7.1.1	Fund Allocation	allows an organization to detect and prevent overspending for defined accounting segments.
S.7.1.2	Budgetary Reporting	provides the organization a mechanism for performing budget resource and execution reports
S.7.1.3	Budget Execution Planning	enables the organization to create a plan for financial execution of the approved and resourced programs
S.7.2	Programming Management	enabling strategic management of programs across the enterprise with the intention of improving the organization's performance
S.7.2.1	Command Programming	allows for command analysis to balance and integrate resources among various programs to include:force structures, weapon systems and support systems within fiscal constraints
S.7.2.2	HQDA Programming	allows for HQ level analysis to balance and integrate resources among various programs to include:force structures, weapon systems and support systems within fiscal constraints
S.7.2.3	Integrated Planning (PEG)	enables a central effort to allocate Army resources to programs over the POM/FYDP years.
S.7.2.4	Manpower Planning	enables the analysis of manpower requirements and end strength targets to support future resource requirements.
S.7.2.5	PPBE Modeling & Simulation	helps to determine Army requirements through technical or mathematical modeling that produces analysis to predict the numbers and kinds of manpower requirements/personnel, equipment, training and other resources needed to perform a group of specific functions
S.7.3	Budget Formulation	helps the organization to facilitate and manage strategic, operational or programmatic resource decisions
S.7.3.1	Budget Structure and Maintenance	creates reporting structures to track, maintain and report budgetary resources
S.7.3.2	Budget Exhibits and Justification	supports requests for appropriation information from Congress and helps justify the President's Budget. It includes required exhibits and detailed budget justifications for committee review.
S.7.3.3	HQDA Budget Formulation	enables the HQs development of detailed fund estimates to support program plans. (POM, BES, etc.)
S.8	Cost Management	helps the organization forecast future expenditures in an effort to stay within budget
S.8.1	Cost Accounting	this enables an organization to record, analyze and report all costs related to the enterprise.
S.8.1.1	Cost Structure and Maintenance	creates a hierarchy/structure to capture costs for specific segments in the organization
S.8.1.2	Cost Accumulation and Allocation	determines cost allocations and intragovernmental entity costs by cost segments
S.8.1.2.1	Cost Accumulation and Allocation for Receipt, Store, Issue, Return and Distribution	Facilitates cost accumulation and alloction for receipt, store, issue, return and distribution transactional processes.
S.8.1.2.2	Cost Accumulation and Allocation for Procurement and Sales	Facilitates cost accumulation and allocation for procurement and sales transactional processes.

S.8.1.2.3	Cost Accumulation and Allocation for Maintenance, Manufacturing and Force Management Enablers	Facilitates cost accumulation and allocation for maintenance, manufacturing and force management transactional processes.
S.8.1.2.4	Cost Accumulation and Allocation for Labor, Personnel and Pay Integration	Facilitates cost accumulation and allocation for personel pay integratted transactional processes.
S.8.1.3	Labor Time Tracking	allows the organization to track the time spent against different labor categories and will help align the work performed to the end products and services in an organization
S.8.1.3.1	Time Tracking from Maintenance and Manufacturing Labor Confirmation	Enables time tracking from maintenance and manufacturing business processes where labor confirmations capture time.
S.8.1.3.2	Time Tracking from Timekeeping	Enables the time tracking from personnel timekeeping.
S.8.2	Cost Performance Management	allows an organization to plan, measure, control and report indirect & direct costs and helps identify areas of improvement
S.8.2.1	Cost Planning and Reporting	allows organizations to estimate and forecast the expected cost and quantities of a program, project, organization or operation and produce analytical reports on all segments.
S.8.2.1.1	Cost Planning and Reporting for Receipt, Store, Issue, Return and Distribution	Facilitates cost planning and reporting for receipt, store, issue, return and distribution transactional processes.
S.8.2.1.2	Cost Planning and Reporting for Procurement and Sales	Facilitates cost planning and reporting for maintenance, manufacturing and force management transactional processes.
S.8.2.1.3	Cost Planning and Reporting for Maintenance, Manufacturing and Force Management Enablers	Facilitates cost planning and reporting for maintenance, manufacturing and force management transactional processes.
S.8.2.1.4	Cost Planning and Reporting for Labor, Personnel and Pay Integration	Facilitates cost planning and reporting for personel pay integratted transactional processes.
S.8.3.1.3	Labor Time Integration to Support Reimbursable Order Management and Billing	Enalbes labor time integation to support reimbursable order management and billing.
S.9	Accounting	helps you manage and record your invoicing, sales, purchases, inventory, cash transactions, and more.
S.9.1	General Ledger Management	Provides a thorough record of all financial transactions and allows to view all entries in one central location. It is the basis for the organization's financial statements.
S.9.2	Financial Reconcilitation	confirming the reliability of the organization's accounting records by balancing transactions.
S.9.2.1	Cash Management	incorporates techniques designed to accelerate and control collections, ensure prompt deposit of receipts, improve control over disbursement methods, and minimize idle cash balances
S.9.2.2	Reconciliation with Treasury Balance	verifying Treasury's general ledger account balances can be traced to aggregated or discrete agency transactions and aggregated or discrete agency transactions can be traced to the point of origination and source documents
S.9.2.2.1	Reconciliation with Treasury Vendor for Payables and Receivables	Facilitates Treasury reconciliation for cash and expenditure reporting for payables and receivables
S.9.2.2.2	Reconciliation with Treasury for Personnel Pay	Facilitates Treasury reconciliation for cash and expenditure reporting for personnel pay
S.9.3	Receivables Management	enabling the collection of payments due for sales in a timely manner.
S.9.4	Asset Accounting	it serves as a subsidiary ledger to the General Ledger, providing detailed information on transactions involving fixed assets.
S.9.5	Payables Management	help the organization track vendors, manage vouchers, process payments, and analyze vendor performance.
S.9.5.1	Procure to Pay Payables Management	Facilitates vendor payables management.
S.9.5.2	Personnel Pay Payables Management	Facilitates personnel payables management.
S.9.6	Revenue Management	implements the practice designed to optimize the revenue potential of an asset through all market conditions.
S.9.7	Reimbursable Management	helps to manage reimbursable invoicing, reconciliation, closeout, intragovernmental payment requests, and reimbursable reporting.
S.9.8	Funds Management	this service enables the monitoring of availability of funds, distributing funds, capturing financial transactions and closing out operations for each period.