



# DEPARTMENT OF DEFENSE

## DoD Enterprise Asset Visibility Continuous Process Improvement Strategy

Assistant Secretary of Defense for Sustainment  
August 2022

## A Message from the Assistant Secretary of Defense for Sustainment

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To support the execution of the National Defense Strategy and the mission of Department of Defense (DoD) logistics, DoD operates a complex multi-billion-dollar global supply chain. DoD purchases, stores, maintains, transports, and returns supplies and equipment globally across thousands of permanent and temporary bases and operational locations. Critical to efficient and effective management of the DoD supply chain is an unprecedented level of asset visibility, and transparency of asset information at both the local and enterprise levels. Without this visibility, it is very difficult, if not impossible, to efficiently and effectively manage and account for DoD's global inventories, whether in-storage, in-process, in-transit, or in-use.

Asset visibility data is a force multiplier required to make responsive logistics decisions across all major supply chain nodes. While DoD has made significant progress toward improving asset visibility, opportunities for greater DoD enterprise-level integration still exist. This Strategy highlights the asset visibility challenges of the current logistics environment, provides the vision for the future of enterprise-level asset visibility, along with a set of objectives to guide DoD-wide improvement efforts. These objectives represent areas of opportunity for the continuous improvement in the standardization and automation of data capture, innovation and integration of business processes, and the interoperability of data across the DoD enterprise. Improvement of asset visibility is essential to Warfighter readiness, and to the success of DoD's logistics operations. Asset visibility improvement will never be "finished" as there will always be a need to support changes in operational and business environments. DoD will continually focus on asset visibility improvements to enhance readiness and support to the Warfighter.



Christopher J. Lowman  
Assistant Secretary of Defense for  
Sustainment

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## Introduction

The mission of DoD Logistics is to provide responsive, sustainable, and cost-effective logistics and materiel readiness on a global scale. In support of these outcomes, along with its broad range of diverse responsibilities, DoD operates a complex multi-billion-dollar global supply chain to deliver a wide range of diverse products, materials, supplies, and equipment to all bases, and operational locations to help guarantee Warfighter readiness. These assets are purchased, stored, maintained, transported, and returned between permanent and temporary bases across the globe. Figure 1 illustrates the breadth and depth of DoD's logistics and supply chain complexity.

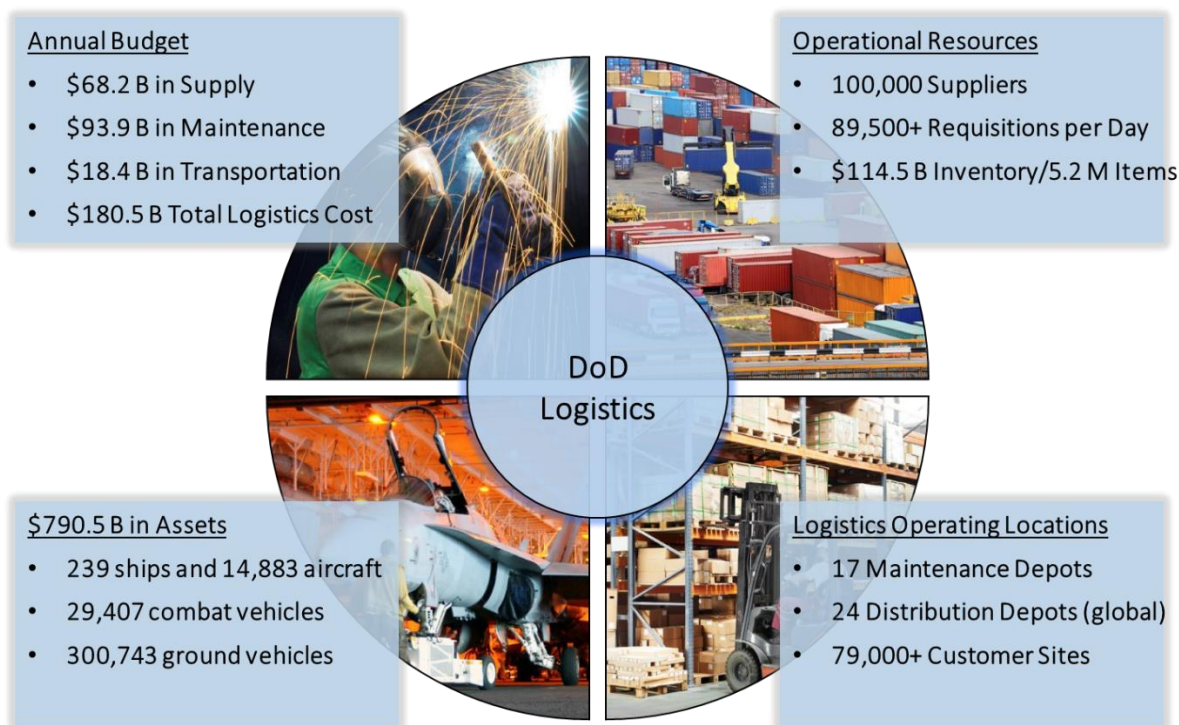


Figure 1 - DoD Logistics as of FY20

Unlike industry that typically optimizes its supply chain for cost and service, DoD must optimize its supply chain for Warfighter readiness while balancing cost, efficiency and effectiveness, and accountability/auditability requirements. Further complicating this are the unique challenges associated with DoD's supply chain:

- Combatant Commander (CCDR) priorities – As areas of operations evolve, change, and/or move, CCDR priorities and needs change – to ensure what is needed is available when and where it is needed, near real-time visibility into asset inventories, and the health of those inventories across DoD, regardless of location, is paramount.
- Inventory Management

- *Long lines of supply* – DoD’s supply chain spans “factory to foxhole.” Millions of assets are spread globally across tens of thousands of locations making it difficult to obtain and maintain visibility of accurate inventories.
  - *Diversity of items* – Conducting DoD missions requires a large variety of items each with their own inventory condition, accuracy, and visibility requirements.
  - *Unstable demand* – Conflicts, humanitarian efforts, and other exceptional events can arise at any time anywhere. When these events occur demand increases dramatically, and existing stockpiles are rapidly depleted. In order to maintain readiness, it is critically important to have visibility of what assets are available, their location, and what condition they are in.
- Dynamic location landscape – Point of use locations change as operations initiate, deploy forward, change, or terminate, creating specific complications for transportation, inventory management, and accountability.

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*A critical element in achieving the DoD’s logistics outcomes and overcoming DoD’s supply chain challenges is an unprecedented level of asset visibility and transparency of information at both the local and enterprise levels.*

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A critical element in achieving DoD’s logistics outcomes and overcoming supply chain challenges is an unprecedented level of asset visibility (AV) and transparency of asset information at both the local and enterprise levels. Without this level of visibility, it is very difficult, if not impossible, to efficiently and effectively manage global inventories whether they are in-storage, in-process, in-transit, or in-use. Figure 2 illustrates, at a high-level, the optimal flow of AV information, within and between the key supply chain nodes, that this Strategy intends to achieve.

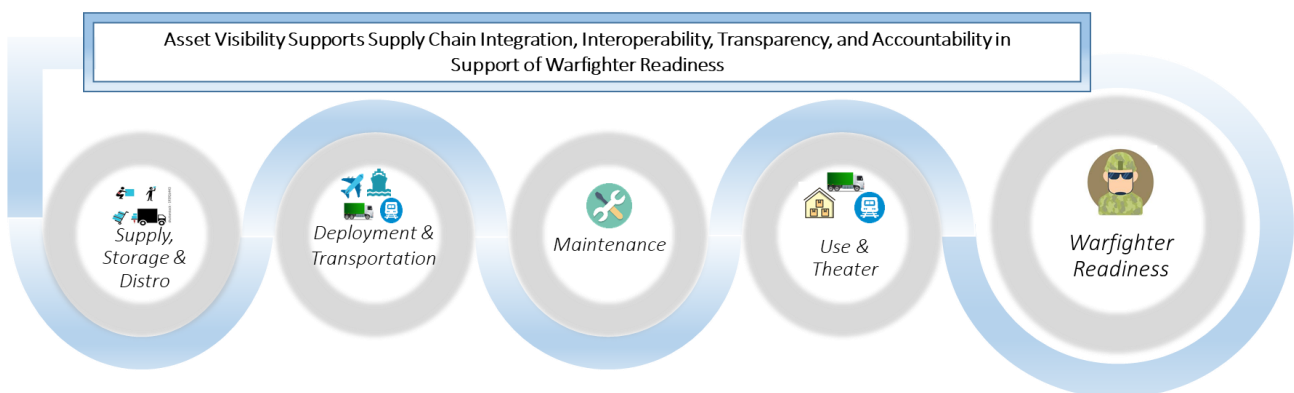


Figure 2 – Sources and Optimal Flow of AV Information

This “DoD Enterprise Asset Visibility Continuous Process Improvement Strategy,” referred to as the Strategy, is a follow-on publication to the prior three editions of the, “Strategy for Improving DoD Asset Visibility.” The previous strategy documents created the much needed framework to guide and integrate Department-wide efforts to collaboratively identify and monitor current and

near-term Component-level AV improvements. That framework also included the establishment of governance, oversight, and responsibilities. Additionally, these strategies highlighted significant demonstrated progress in improving DoD asset visibility, which was critical to DoD being removed from the Government Accountability Office’s (GAO) Supply Chain Management High-Risk List in 2019.

With the strategic framework in place, DoD is now able to shift focus from where the Department has been (focused on the framework and Component-level improvements to date), to where the Department needs to go, DoD-enterprise-level asset visibility. This shift enables the Department to operationalize the Strategy to support DoD’s logistics outcomes and overcome DoD’s unique supply chain challenges through continuous process improvement. This Strategy defines the future state for DoD enterprise-level asset visibility and provides the guidance and the improvement plan required to achieve the level of visibility needed by the DoD enterprise. Figure 3 below provides the structure of the Strategy and it’s supporting documents.

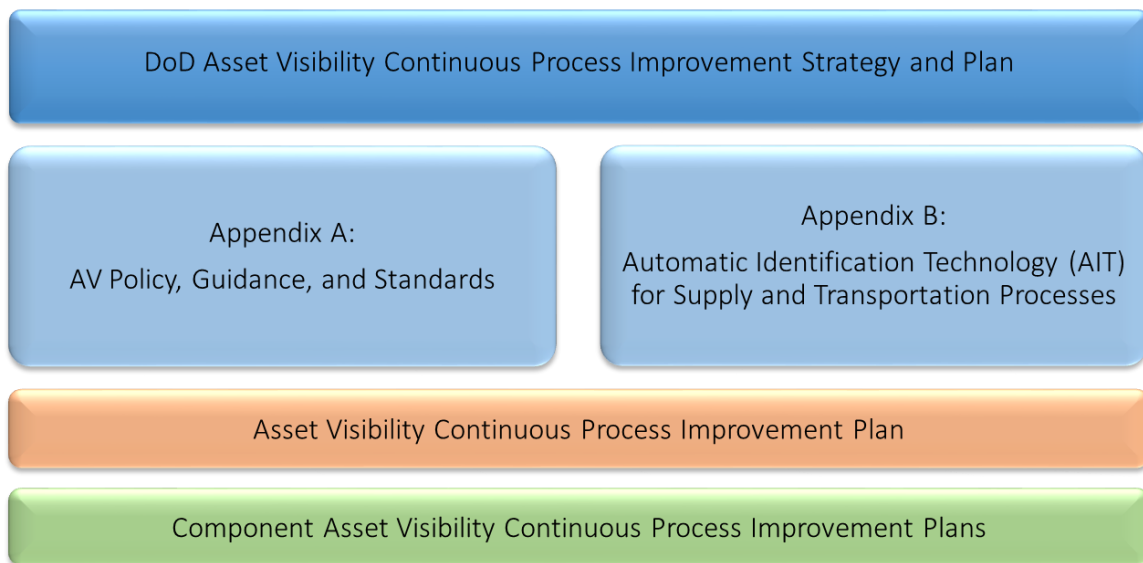


Figure 3 - DoD Asset Visibility Continuous Process Improvement Strategy and Plan Structure

Using appendices and separate improvement plans enables the documents to be developed as stand-alone documents and updated independently without having to republish the entire Strategy. Additionally, the appendices and plans will be published iteratively as to not delay execution of this Strategy.

## Strategic Alignment

The goal and objectives of this Strategy enable enterprise asset visibility improvement activities in support of, and in alignment with the:

- ***DoD Logistics and Materiel Readiness Strategic Plan*** - Goal 1: Deliver Sustainable Logistics to Support DoD Mission Requirements.
  - Objective 1.2: Improve logistics processes that enhance mission operations.
    - LOE 1.2.4: Improve asset visibility policy, procedures, and standards.
- ***DoD Data Strategy*** - Goals of:
  - Visible – Consumers can locate the needed data.
  - Accessible – Consumers can retrieve the data.
  - Understandable – Consumers can find descriptions of data to recognize the content, context, and applicability.
  - Linked – Consumers can exploit complementary data elements through innate relationships.
  - Trustworthy – Consumers can be confident in all aspects of data for decision-making.
  - Interoperable – Consumers and producers have a common representation and comprehension of data.
  - Secure – Consumers know that data is protected from unauthorized use and manipulation.
- ***Joint all Domain Command and Control*** approach for developing the warfighting capability to sense, make sense of, and act at all levels and phases of war, across all domains, and with partners, to deliver information advantage at the speed of relevance.

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### ***DoD Logistics***

***Vision*** - Military Operations Empowered through Logistics.

***Mission*** - Provide Logistics and Materiel Readiness to Deliver Military Capability for the Nation.

*(Logistics and Materiel Readiness Strategic Plan, October 2021)*

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## DoD Asset Visibility Overview – The Current State

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Asset visibility provides supply chain managers and users with timely and accurate information on the location, movement, status, and identity of units, equipment, materiel, and supplies. More importantly, asset visibility facilitates the capability to act upon this information to improve overall performance of DoD’s supply chain practices.

DoD has made, and continues to make, significant progress toward improving near-real-time asset visibility. Today, there are multiple methods of obtaining item-level visibility within and across the DoD enterprise. Data from many DoD component-level logistics activities are collected and integrated to provide a comprehensive view of inventory (equipment and supplies) at the strategic, operational, and tactical levels. Critical enterprise-level visibility capabilities already implemented and in use are:

- *Integrated Data Environment (I)/Global Transportation Network (G) Convergence (C) (IGC)* - IGC is a system developed through a partnership between USTRANSCOM and the Defense Logistics Agency (DLA) that merged USTRANSCOM’s Global Transportation Network (GTN) with DLA’s Integrated Data Environment (IDE) for the purpose of providing the joint logistics community with an integrated set of networked, end-to-end visibility, deployment, and distribution capabilities. IGC receives data from logistics systems from all Services and provides data to many common operating picture and visibility systems currently used by logisticians from all the Services and many Defense Components.
- *DLA’s Asset Visibility (DLA-AV) System* has been integrated with IGC. DLA-AV provides global visibility of assets in all classes of supply and is equipped with query and reporting capabilities to facilitate enhanced logistics decision making. Supply classes tracked by DLA-AV include bulk fuel, wholesale and retail inventory, and ammunition. Integration of DLA-AV into IGC provides users with a single portal for viewing integrated supply/inventory and transportation data. This merger, created a single portal, and combined with proliferation of the availability of the data via web services, makes it possible to support virtually any business process with improved asset visibility data.

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**Asset Visibility (AV)** – *The ability to determine the location, movement, status, and identity of units, personnel, equipment, and supplies. (Source: DoD Dictionary of Military and Associated Terms)*

**In-transit Visibility (ITV)** – *The ability to track the identity, status, and location of Department of Defense units, and non-unit cargo (excluding bulk petroleum, oils, and lubricants), and passengers, patients, and personal property from origin to consignee or destination. (Source: DoD Dictionary of Military and Associated Terms)*

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Previous Asset Visibility Strategy documents included numerous examples of successful efforts to modify business processes, enhance automated information systems (AIS), and deploy AIT capabilities, which are realizing benefits. However, in many cases these successes are characterized by standalone AIT systems and infrastructure, disparate equipment, and non-

standard data sets/formats, which are unsustainable from a cost/resource and efficiency perspective. When multiple organizations pay to solve the same problem, research the same solutions, and learn the same lessons it not only increases enterprise cost, while reducing greater buying power through enterprise contracts, but also has an adverse effect on interoperability and enterprise-level visibility. Moreover, each implementation site is left to contend with cybersecurity requirements and un-programmed funding requests for sustainment. While this situation may prove useful to individual Components it does not support DoD enterprise-level visibility, decision making, nor interoperability. For example, there are thousands of world-wide receipt and issue sites in DoD, which generate millions of transactions all endeavoring to improve asset visibility each with a stand-alone custom solution.

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*Interoperability enables AV data to be shared and acted upon at the Component and enterprise levels to improve overall performance of the DoD Supply Chain, accountability, and ultimately enhance Warfighter Readiness.*

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The DoD has captured lessons learned from these disparate, albeit successful, solutions to inform policies and standards to underpin interoperability. These successful projects and outcomes continue to improve the asset visibility needed to assist key operations and logistics leaders in the areas of supply and transportation, inventory and distribution management, and unit deployment, employment, and redeployment. One such example is the Department’s Financial Improvement and Audit Readiness (FIAR) efforts, which highlighted the lack of quality data and incomplete data sets as a root cause contributing to the Department’s inability to obtain a clean audit opinion. Numerous DoD data capture processes, across key life-cycle business processes (acquisition, shipping/receiving, inventory, maintenance, etc.), require manual processes and forms to be completed then hand-keyed into the AIS. This, along with the lack of data edit controls in many AISs that allow free form data entry, results in inaccurate and unreliable information. Figure 4 highlights the challenges within the current state.

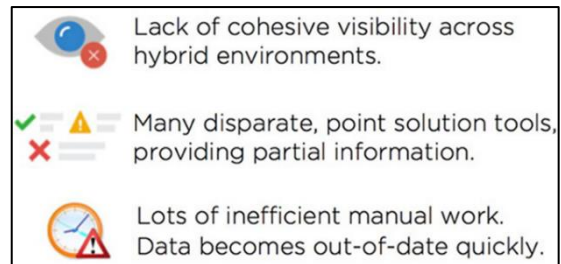


Figure 4 - Current State Challenges

A considerable portion of the DoD’s asset visibility data is contained within Component-level closed/stove-piped systems, and thus is not readily available to the Component or the DoD-enterprise to support analytics and decision making. This situation can result in operational decisions being made based on inaccurate or untimely source data.

# DoD Enterprise Asset Visibility Continuous Process Improvement Plan – The Future State

DoD operates a complex multi-billion-dollar global supply chain to deliver a wide range of diverse products, materials, supplies, and equipment to all bases and operational locations to guarantee Warfighter readiness in support of national objectives. These assets are purchased, stored, maintained, transported, and returned globally between permanent and temporary bases. Asset visibility is a critical element in enabling DoD to efficiently and effectively manage its global inventories. Additionally, managing DoD inventories is not limited to the physical aspect of buying, receiving, storing, or transporting items but also requires the capturing, managing, integrating, and sharing of the related data about the item itself within the Components, across the DoD- enterprise, and with our industry and international partners. Supply chain managers are not only managers of the flow of equipment and supplies but also managers of data capture and the flow of information.

The role of the Services under Title 10, U.S.C., is to organize, train, and equip their respective forces for assignment to the combatant commands during operations, this includes the design, development, acquisition, storage, movement, equipping, distribution and evacuation functions of supply, field services, maintenance, health services support, personnel, and facilities. The Services, under the guidance of the Office of the Secretary of

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*Supply chain managers are not only managers of the flow of equipment and supplies but also managers of data and the flow of information.*

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Defense, continuously improve the business processes and rules that form the foundation for logistics support within and between the Services. The visibility of assets, which will be provided by this future state, prompts greatly increased levels of inter/intra-service cooperation.

In the past, each Service tended to protect its assets, often to the detriment of another Service which might have a higher priority need or an operational requirement more urgent than the owning organization. Visibility of needed items across Service boundaries and visibility within Service lines is not always available or complete. This Strategy endeavors to change this condition by enabling the Department’s ability to access information, through a shared data enterprise, about each of the logistics disciplines, i.e., supply, transportation, maintenance, etc., across the spectrum of strategic, operational and tactical activities. One example of a strategic logistics issue is the redistribution of assets between combatant commands and Services when

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**AV IMPROVEMENT VISION**

*Improved enterprise-level asset visibility, through continuously improving and standardizing data capture, innovating business processes, and sharing data with the DoD enterprise, will support more effective supply chain decisions, yielding integrated, end-to-end Warfighter readiness with increased customer confidence.*

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shortfalls exist and priorities are equal, usually associated with contingency operations. Each Component, including the Joint Staff, will be able to quickly search the Services' inventories to see where assets exist. The asset visibility advantage derived is the reduction of preparatory time required to assess and task the Services to search inventories, transfer ownership, and deliver to the operational location. Today this is accomplished in a manually intensive environment. Moving beyond the knowledge of the identity, location, and status of equipment to a full analysis of the systems these assets reside in will provide decision-makers with total visibility of all assets and the knowledge to deploy them effectively. Figure 5 highlights the future state of asset visibility.

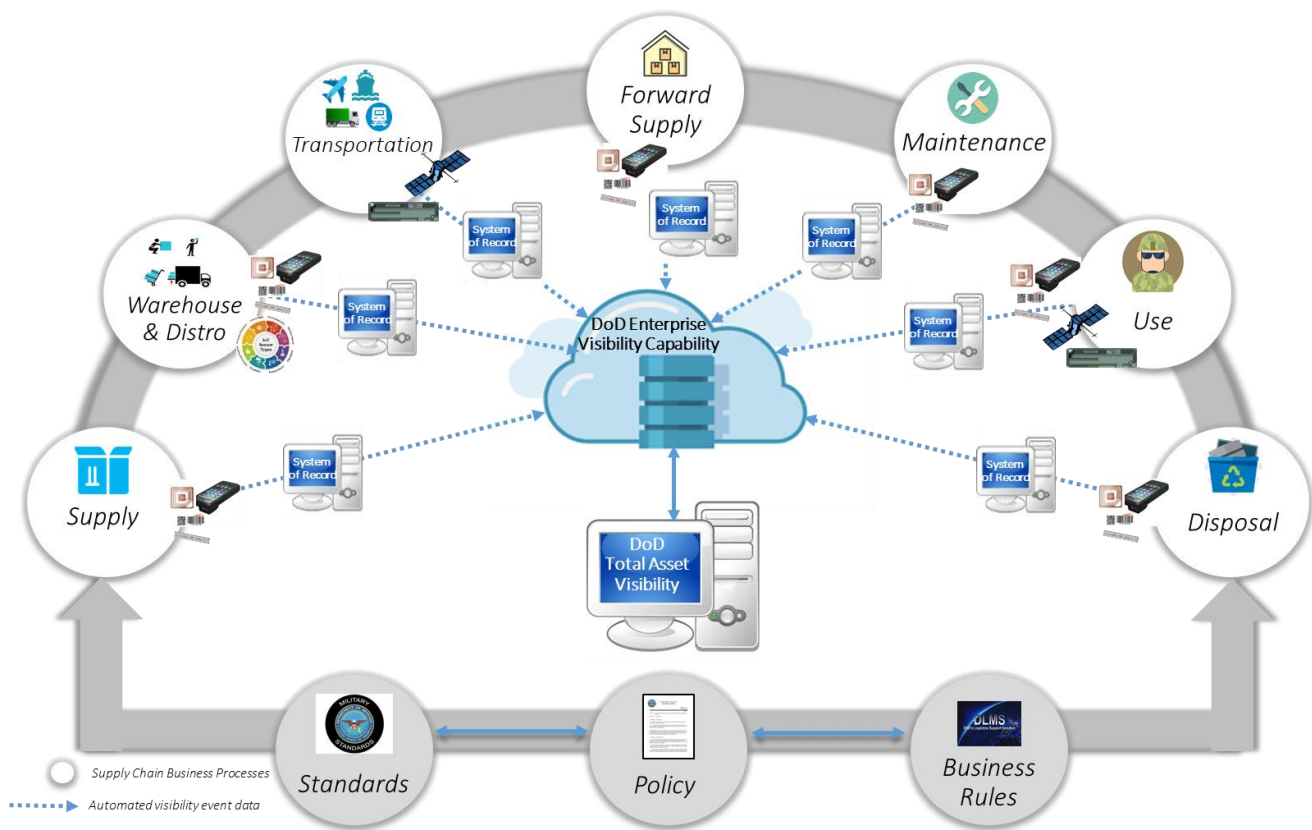


Figure 5 - Asset Visibility Future State

The overall goal of this Strategy is the continued improvement of asset visibility. By enabling the capabilities that support timely, accurate, and actionable information regarding the identification, location, quantity, condition, movement, and status of DoD assets throughout the item's life cycle, this goal can be achieved. The item's life cycle includes the source of supply to operational customers, return activities, as well as repair, disposition, and sustainment activities. Support of Warfighter readiness must be maintained and improved in a constrained funding environment, along with supply chain execution risk being mitigated to improve the ability of the supply chain to deliver. The risk mitigation will be focused on reducing disruptions in the deployment, redeployment, and distribution of critical assets, and ensuring the right asset is

delivered to the right place (point of need), at the right time, in the right condition, and in the right quantity to satisfy the Warfighter's readiness requirements.

Continuous process improvement and enhancement of asset visibility information flows and technologies are enduring goals of the DoD in a manner that provides the ability to manage asset life cycles, and to transform asset data into actionable information supporting asset and inventory management. Current efforts to update DoD policy, re-engineer business processes to include inserting automatic data collection technologies, implement industry standards for data capture and transmission, and enhance availability of inventory data at the DoD enterprise-level will support the achievement of the following strategic outcomes:

- Visibility of available resources, DoD-wide, to meet customer requirements regardless of which Component has them or whether they are in-transit, in-storage, in-process, and in-theater.
- Greater efficiency of physical inventories, receipt processing, and cargo tracking to help preclude unnecessary procurement of assets.
- Improved inventory existence, completeness, and accuracy in support of audit readiness.
- Enhanced interoperability.
- Improved accuracy, reliability, and timeliness of data collection with the least amount of human intervention.

## Goal and Objectives

Today, data is a force multiplier required to make responsive logistics decisions across major supply chain nodes. However, limitations still remain in the effectiveness and efficiency of data capture, the ability to maintain visibility of assets as they traverse the end-to-end supply chain, and in the ability to create an enterprise view of the data. The goals and objectives stated below represent areas of opportunity for sustainment and continuous improvements in efficiency and effectiveness. Asset visibility as the enabler of logistics and other DoD business processes will never be "finished", it will always be responsive to support changes in the operational and business environments. Activities and improvements undertaken within the framework of this Strategy will support the following goal and objectives:

### *Goal:*

Enterprise visibility data/information, based on standards and automation, are used to enable enterprise-level analytics in support of DoD mission, goals, and objectives.

### *Objectives:*

1. Modernized policies, anchored in collecting data via manual processes and forms, that maximize the use of Automatic Identification and Data Capture (AIDC).
2. Standards-based interoperable visibility data is captured automatically at point of supply chain business process events enabling machine-to-machine execution of downstream business processes - capture once use many.

3. Event/visibility data/information is interoperable and shared with Component and DoD enterprise-level systems and data stores - accurate, timely, standardized.
4. Successful Component implementations of asset visibility capabilities are leveraged as the baseline for establishing DoD enterprise solutions and/or standards, to the greatest extend possible - build once use many.
5. The rate of adoption of modern AIDC capabilities and technology is increased.
6. AV data validation and data quality assurance efforts is improved.

### Disconnected Operations

When units are deployed in limited forward operating environments, it can become challenging to bring full AISs, including AIDC. This Strategy acknowledges that there will be situations where there is a limitation on connectivity in one form or another whether caused by distance, system malfunction, nefarious acts, etc. However, with the number of disparate variables around each of these situations, this document is not intended to provide all possible solutions. Therefore, DoD Components must always be prepared to maintain asset visibility in any situation where connectivity is limited or lost.

### Section Summary

While DoD has the tools and infrastructure in place that support enterprise-level asset visibility, this environment is not static. Continuously changing budgets and operational requirements/demands will result in changes to how, which, and when asset visibility data are captured and delivered to the enterprise. The goal and objectives stated above represent areas of opportunity for sustainment and continuous improvements in efficiency and effectiveness. As stated earlier, asset visibility as an enabler of logistics and other DoD business processes, will never be “finished” and will always be responsive to support changes in the operational and business environments.

## DoD Asset Visibility – Building Blocks to Improve Asset Visibility

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*DoD and Component level policy, industry and military standards, business process integration, and technology (AIS and AIDC/ Automatic Identification Technology (AIT) are the necessary basic building blocks in DoD's effort to provide timely and accurate asset visibility within the supply chain, whether assets are in-storage, in-transit, in-process, or in-use. In order to achieve the goal and objectives of this Strategy, AV continuous process improvement efforts will fall into one of these building block areas.*

Asset visibility is usually most closely associated with the use of AIT within DoD. However, AIT alone cannot enable asset visibility. The use of AIT must be integrated into the relevant business processes along with accurate association of AIT captured data with the logistics data resident within AISs. These AISs translate the supply chain data into human-usable formats (user interfaces or visualizations), which provide actionable information for decision makers.

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*AIT alone cannot enable asset visibility. The use of AIT must be integrated into the relevant business processes along with accurate association of AIT captured data with the logistics data resident within AIS.*

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### DoD Policy & Guidance

The intent of DoD policy is to *not prescribe which AIT technologies (barcode, radio frequency identification (RFID), mobile device, hand-held scanner, etc.) must be used at the point of supply chain event*, but instead to improve overall asset visibility by providing requirements such as:

- Leveraging asset visibility (AIDC/AIT) capabilities that have already been implemented and proven within DoD. The way to enable interoperability, improve visibility of assets as they move through the supply chain, accountability, and sustainability at reduced cost is through a standards-based enterprise- level, Component and DoD, approach within the Department – *Result: Avoids the inefficient utilization of funds to build a capability to reengineer, design, develop, integrate, field, and maintain same AIDC/AIT solution already implemented by another Component – build once, use many;*
- Enabling secure AIT Technologies through wireless infrastructure improvement of public/private wireless capabilities, such as 4G LTE/5G coupled with DoD's Iridium Satellite Networks – *Result: Supports supply chain needs without the cost and sustainment of fixed infrastructure(s);*
- Integrating AIT capabilities into AISs and business processes – *Result: Enables automatic data capture to improve data accuracy and timeliness;*
- Collecting the right data set at the point of an event, and the requirement to share these data with DoD enterprise systems – *Result: Enables interoperability within and across the DoD, and can automate the business rule validation within a business process; and*
- Using DoD standard AIT devices/media and defined standard data formats – *Result: Enables secure communication within DoD, and industry and international partners. Also*

*supports portability, reusability, reliability, and reduced training time for users that move between programs and Components.*

Review of current DoD policy must be made to ensure these requirements are clearly and consistently stated

## Business Process Integration

Asset visibility is not just about applying barcodes or RFID to items or scanning these during a business process. The real benefit of asset visibility comes from the ability to integrate the passively captured data into relevant AISs along with the ability to share and use the captured data to inform downstream business processes without having to re-enter the data – *enter once use many*. AIT capability insertion and business process re-engineering are strongly related and must be performed in a coordinated manner.

Many locations within DoD still handle large amounts of paper-based data within their business processes, and often these data are manually entered into AISs and then back to paper just to be re-entered at the beginning of the next business process; this situation continues many times over. Paper usage and human involvement in this way is extremely inefficient, ineffective, and costly not only in the time spent transferring/entering data, but also in the time spent finding and fixing errors, along with the impact errors in data have on analysis and ultimately decisions. Most data can be carried electronically in a form that can be attached to the object, such as barcodes and/or RFID tags. And, in most cases AIDC systems work without human involvement, or when human involvement is required, it is usually limited to a user scanning an AIDC equipped item. This frees up resources (funds and manpower) that can be used elsewhere to perform other business and/or operational functions. Automatic data capture combined with automated population of AISs and integrated business processes provides the real benefit of improved data integrity, asset visibility, asset accountability, logistics velocity, and materiel readiness.

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*Business process integration is made possible by identification standards, data capture standards, and data exchange standards allowing information to flow through the DoD enterprise with the least amount of human involvement.*

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## Standards

Standards are critical to the achievement of DoD-enterprise asset visibility and successful deployment of AIT. Deployment of non-standards based proprietary asset visibility solutions renders the solution useless outside the implementing locations, and prevents interoperability within and outside the Component. Most AIDC technologies, specifically the data formats, are defined by international and national technical standards. International, national, or industry application standards also exist to define the use of AIDC technologies. It is the intent of this Strategy to ensure that the Department's deployment and use of AIDC capabilities remain in alignment and in compliance with applicable industry standards. This alignment will ensure DoD

can interoperate not only within and across Components but also with its industry and international partners.<sup>1</sup>

## Technology

AIDC capabilities are a diverse set of technologies that share the common purpose of identifying, tracking, recording, storing, and communicating essential business data. AIDC, when combined with AISs, can reduce the manpower required to perform essential functions and improve life cycle data about the critical assets that DoD purchases and maintains.

AIDC capabilities include a wide range of solutions, each with different data capacities, form factors, capabilities, and "best practice" uses. These capabilities also include mobile computing devices (smart phones, tablets) that facilitate the collection, manipulation, or communication of data from data carriers as well as through operator entry of data via voice, touch screens or key pads.

Each member of the AIDC technology family has its own specific benefits and limitations—meaning there is no "best" technology. *Business processes and mission may be better served by the use of multiple AIDC capabilities in combination to provide the best solution and outcomes.* Additionally, combining technologies can help overcome variations in available AIT capabilities at any given location. Not every location is going to be operating at the exact level of automation at exactly the same time. To illustrate, Figure 6, "AIT Integrated Data Plate", shows that data can be read and consumed at the level of technology that is available at any



Figure 6 - AIT Integrated Data Plate Example

given location – human readable (anyone can read), barcode (one human scan captures all the data), and RFID (data is captured automatically with no human intervention).

The Department will also focus on the reduction of custom middle-ware and transform to the use of mobile applications and application protocol interface (API) gateways.

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**Automatic Identification and Data Capture (AIDC):** A diverse set of technologies that share the common purpose of identifying, tracking, recording, storing and communicating essential business data.

(Source: MH 10)

**Automatic Identification Technology (AIT):** A suite of technologies enabling the automatic capture of data, thereby enhancing the ability to identify, track, document and control assets (e.g., materiel), and deploying and redeploying forces, equipment, personnel and sustainment cargo.

(Source: DoD Dictionary of Military and Associated Terms)

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<sup>1</sup> A Standards appendix to this document will be developed to highlight the current national and international standards in use within DoD along with the standards organizations DoD interacts with.

While AIT cannot provide solutions to all supply chain issues, the technologies do have the ability to influence strategic, operational, and tactical change across DoD. <sup>2</sup>

Technical advancements and future trends in supply chain practices will continue to be assessed in order to take advantage of improvement opportunities to better integrate processes and AIT within the DoD supply chain. Figure 7 shows the hierarchy of AV Improvements supporting DoD priorities along with the relationship to the building blocks.

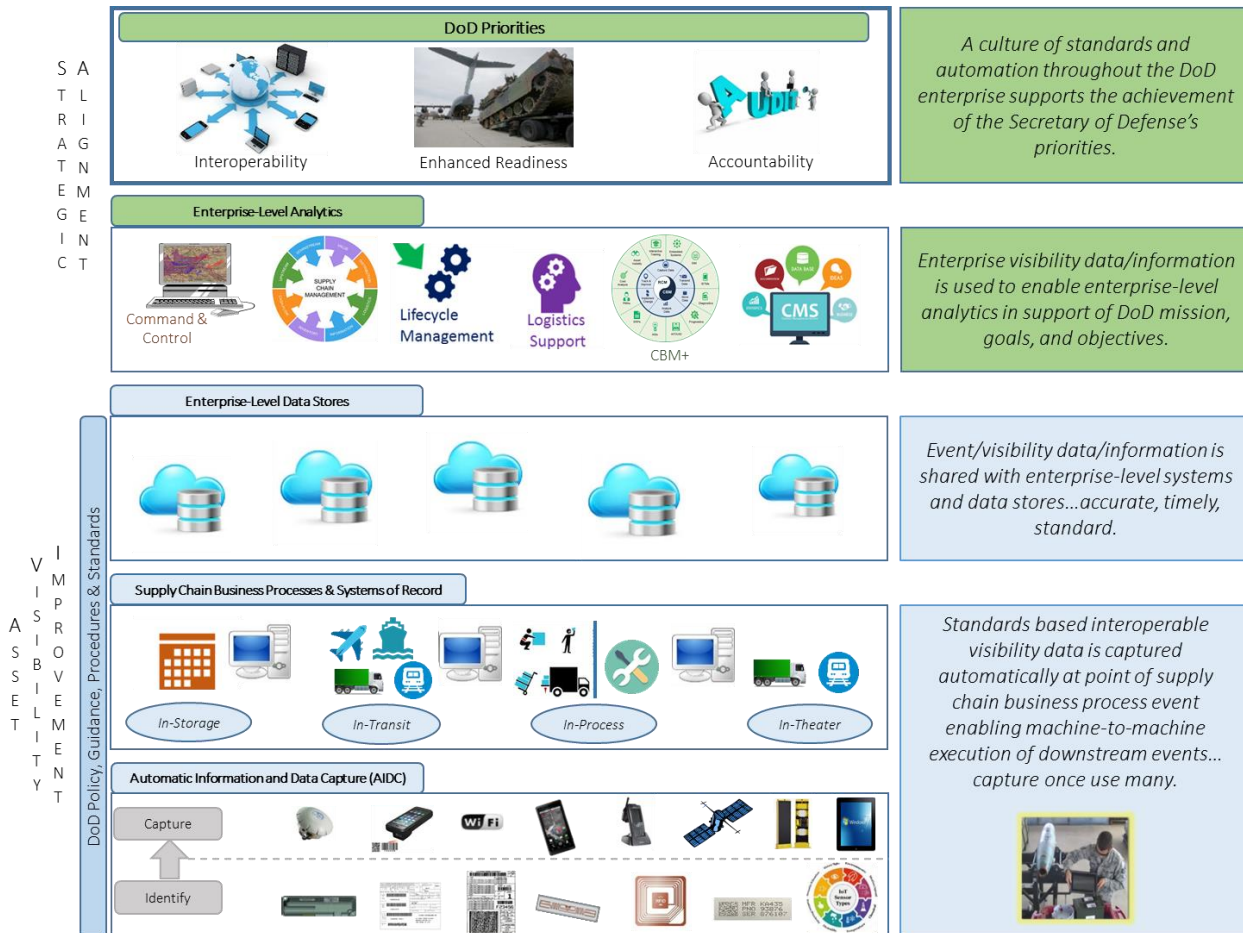


Figure 7 - AV Foundational Elements Aligned with Goals & Objectives

<sup>2</sup> An AIT appendix to this document will be developed to provide detailed descriptions of AIT capabilities and how they can be used within key supply chain processes.

## Oversight and Responsibilities

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To ensure successful implementation of this Strategy, a defined and accountable executive management oversight structure has been established to oversee and manage the Strategy's execution, and to track progress. Likewise, the organizational responsibilities are assigned both to oversee the Strategy's execution and to accomplish the improvement efforts.

### Assistant Secretary of Defense for Sustainment (ASD(S))

- Prescribes Department-wide policies and procedures for the conduct of asset visibility matters driving the content of this Strategy.
- Oversees development, implementation, and updating of the Strategy.

### Deputy Assistant Secretary of Defense for Logistics (DASD(Log))

- Develops, implements, and updates the Strategy.
- Develops and coordinates Department-wide policies and procedures necessary for improving asset visibility in accordance with this Strategy.
- Facilitates collaboration and resolution of asset visibility issues in the most common and interoperable way possible.
- Chairs the Logistics Executive Steering Committee (LESC) for the purpose of ensuring DoD Component awareness, development, updating, implementation, and status reporting of Component-level efforts.

### Logistics Executive Steering Committee

- Conducts in-process reviews, as requested by the Asset Visibility Working Group (AVWG), of enterprise-level asset visibility efforts in order to ensure they are:
  - Achieving milestones, expected outcomes, and measures of success of Component-level efforts,
  - Coordinated and shared across DoD, and
  - Used to inform resource planning and investment decisions to achieve Department-wide improvements in asset visibility.
- Provides a common forum for inter-Component discussion and input to this Strategy.
- Comprised of flag-level representatives from ODASD(Log), Joint Staff, the Military Services, DLA, USTRANSCOM, and the General Services Administration (GSA).
- Reviews this Strategy document at least annually to identify new opportunities or amend supporting actions, and to respond to changing or emerging DoD logistics challenges.

### Military Services, Joint Staff, DLA, USTRANSCOM

- Identify opportunities to continuously improve asset visibility, within their respective organizations and across DoD, to support the goals and objectives stated in this Strategy.
- Provide representation on Asset Visibility Working Group to support initiatives related to continued Strategy development, implementation, studies, and analysis.

- Ensure the successful execution of all Component-level AV efforts for which their organization is the office of primary responsibility (OPR) – Provide periodic update to the asset visibility working group for collaboration purposes.

### Asset Visibility Working Group

The AVWG, chaired by the Office of the DASD(Log), supports the development and execution of this Strategy and includes representatives from the Military Services, USTRANSCOM, DLA, Joint Staff, and other government agencies as needed. The working group identifies and shares visibility capabilities and opportunities for improving end-to-end asset visibility. The working group also determines if improvement efforts that are underway or planned can be collaborated on and leveraged across DoD. The AVWG:

- Identifies opportunities across the end-to-end supply chain to further improve asset visibility within DoD whether via policy, standards, or technology.
- Interfaces with industry to keep current on new and emerging AIDC and trends in supply chain management practices.
- Monitors the status of improvement initiatives.
- Reports progress to the LESC, as needed.
- Meets monthly.

USTRANSCOM’s IntelShare/Intelink website, “DoD Asset Visibility (AV), Automatic Identification Technology (AIT), and Active RFID Tagging Reports” community (URL: <https://intelshare.intelink.gov/sites/arfidmetrics/SitePages/AVWG%20Home.aspx>), is used to capture, track, manage, and share detailed information about asset visibility improvement efforts across DoD. Consolidation and tracking of such efforts will provide the LESC and the AVWG information necessary to help focus and prioritize the efforts.

### Progress Reviews

To ensure Strategy actions are being implemented as expected, the ODASD(Log), as the chair of the AVWG, will report progress to the LESC, on an as needed basis.

### Product Lead Logistics Information Systems (PL LIS)

*[The Project Manager for Army Data and Analytics Platforms (PM ARDAP) discontinued the Automated Movement and Identification Solutions (AMIS) Product Lead office and transferred responsibility for Defense Business System Capability Support of radio frequency in transit visibility (RF-ITV) to PL LIS. The management of procurement contracts for associated unit hardware and RFID tags is now managed by Program Executive Office Enterprise Information Systems’ (PEO-EIS) Computer Hardware, Enterprise Software and Solutions (CHESS) office, with PL LIS providing technical support. Commands world-wide will use these CHESS managed contracts to acquire RFID hardware & components to support their Asset Visibility requirements.]*

PL LIS is the chartered post-deployment acquisition manager for RF-ITV. PL LIS reports to PM ARDAP within the Army PEO-EIS. Commands and organizations acquire hardware to facilitate RF-ITV operations via the Project Manager CHES (PM CHES) managed contracts. PL LIS will continue to validate/identify CHES resourced assets as RF-ITV compatible. These contracts continue to be a managed means of providing standardized commercial AIT products, services, and sustainment support. The use of AIT to improve and speed the input and output of data to AISs is growing rapidly; DoD's ability to control the configuration and accessibility of AIT is crucial to standardized adoption of technologies across the DoD.

PL LIS capability support functions in support of RF-ITV include:

- Install and maintain a worldwide network of RFID read sites in locations required by the COCOMs, Services, and Agencies.
- Maintain the RF-ITV Tracking Web Portal to display ITV data received from RFID, cellular, and satellite tracking devices.
- Maintain interfaces to designated systems across the DoD to provide ITV data.
- Identify existing commercial RFID hardware compatible with RF-ITV to facilitate effective employment of CHES contracts to acquire RFID components.
- Identify new and/or emerging technologies.
- Provide an AIT Help Desk.

PM CHES contracts should be used to purchase AIT capabilities to ensure standardization and interoperability.

## DoD Asset Visibility Continuous Process Improvement Approach

Asset visibility is not an end in and of itself, but a means of making information about assets interoperable and available in support of informed decision making at all levels in the logistics enterprise. It encourages efficiencies and promotes effectiveness throughout the DoD supply chain. It is also an objective DoD will continually strive to improve. As DoD's budget and operational environments continue to change, there will always be additional information requirements and/or demands for improved timeliness and accuracy of asset visibility data. Continued sustainment and enhancement of the existing asset visibility enterprise supports increased readiness, optimized decision making, and improved customer confidence, and will remain an ongoing focus of DoD. Figure 8 outlines the Department's approach to AV continuous process improvements.

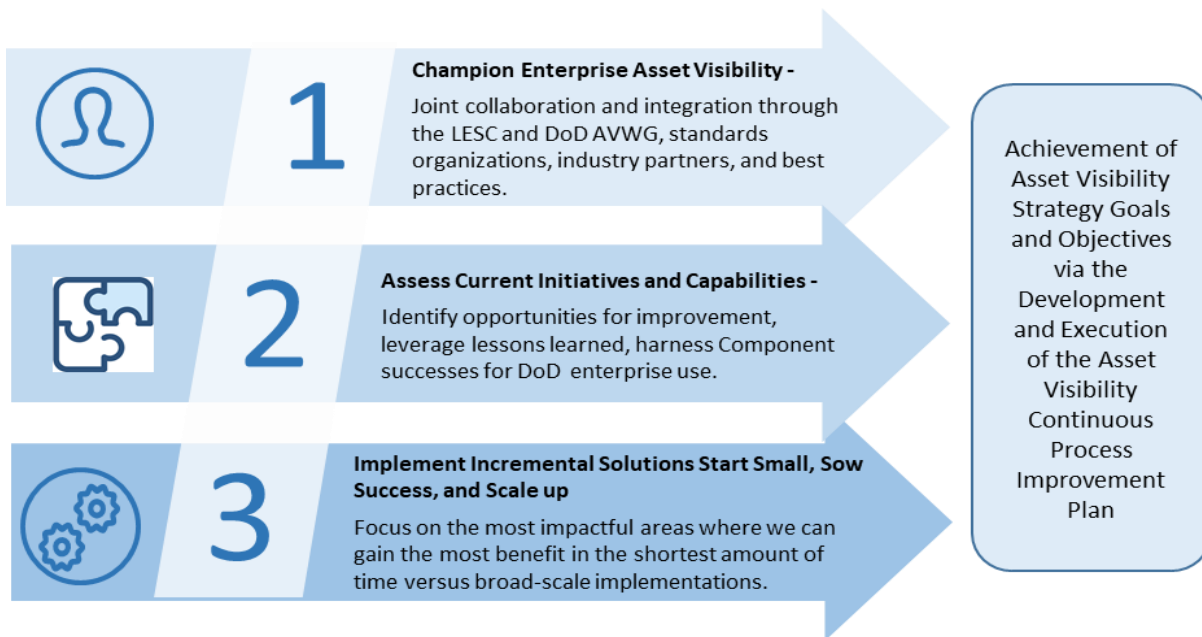


Figure 8 - AV Continuous Process Improvement Approach

## Asset Visibility Continuous Process Improvement Plan

This Strategy will include an improvement plan appendix<sup>3</sup> that is intended to help focus and guide logistics AV improvement efforts across the Department.

The plan appendix will identify the improvement action items needed to achieve the Strategy goals and objectives. These action items will be aligned with a specific “Building Block” (as described previously on page 13). Actions items will also include defined target outcomes/metrics, an estimated completion date, and assigned a primary action office. Figure 9 highlights the AV Continuous Process Improvement Cycle.



Figure 9 – Asset Visibility Continuous Process Improvement Cycle chart

## AVWG Monitoring Progress

The AVWG will track the execution of the action items. Each action item will have its own quad maintained by the primary action office. The quad charts will be reviewed monthly at the AVWG meeting in order to monitor progress. The Chair of the AVWG will update the LESC, as needed, with any issues/challenges or changes in timelines. Additionally, the closing of any action may require approval of the LESC.

<sup>3</sup> A DoD Continuous Process Improvement Plan that provides the details on how the goal and objectives of this Strategy will be accomplished, will be developed by the AVWG, as a separate document, and attached to this Strategy.

## Component-Level Asset Visibility Continuous Process Improvement Plans

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The duration, complexity, breadth, and depth of the implementation of asset visibility improvements/capabilities differs from Service to Service, system to system, and commodity to commodity. Implementation is planned and accomplished at the Component-level by those most familiar with the mission, systems, business processes, and commodity. To this end, the Components will develop their own AV Continuous Process Improvement Plans that will align to this Strategy, and be updated bi-annually to, at a minimum, provide:

- Guidance and direction for improving AV
- Goals and objectives
- Alignment with DoD AV Strategy
- Governance, roles, and responsibilities,
- Improvement Approach: Policy/standards, business process, technology
- Implementing actions and timelines
- Implementation challenges
- Improvement initiatives: Outcomes, metrics, AIT usage, linkage to the Component and DoD Enterprises

The Component-level AV plans will be submitted to the ODASD(Log) and briefed to the AVWG.

## Conclusion

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Each DoD Component has diverse requirements, however the Components share a common focus – successful supply chain support of deployment, redeployment, sustainment, and retrograde requirements. Cohesively executing this Strategy, and its associated Improvement Plan, in an integrated manner will require the DoD Components to perform their responsibilities, in their respective locations, with their respective systems, and using their respective processes, while recognizing the interrelationships, key touch-points, and linkages across all capabilities. This integrated execution will ensure logistics decision makers are provided common data and information concerning the identification, location, quantity, condition, movement, and status of DoD assets throughout their life cycle as they move from source of supply to operational customers, during return, as well as during repair and disposition.