



Research & Development ADDITIVE MANUFACTURING (AM)

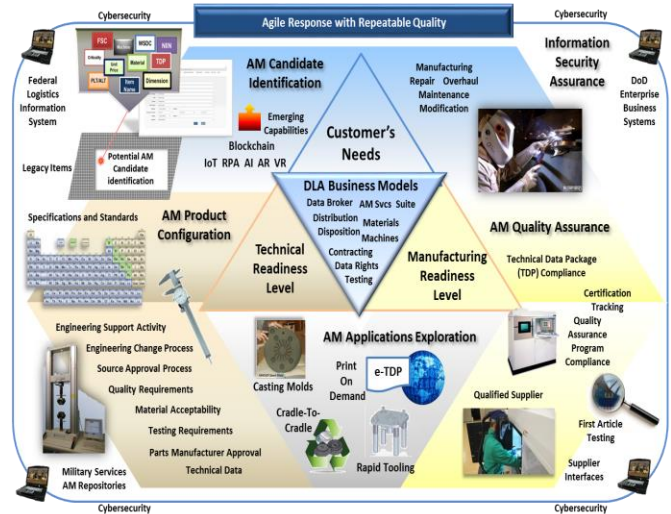


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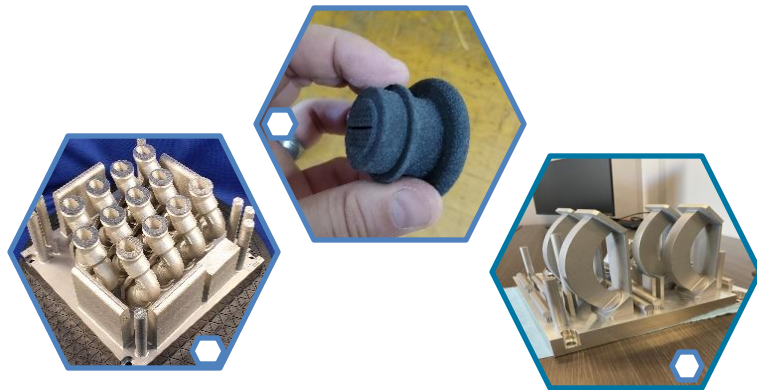
OBJECTIVE

Leverage our relationship with industry to ensure a robust and capable industrial base, generate innovative and efficient solutions, and maintain a secure and resilient supply chain. In addition, define DLA's strategic role in DoD's evolving Additive Manufacturing (AM) ecosystem and enabling the DLA Business Processes that allow integration of AM parts into DLA's supply chains.



INNOVATION & TECHNOLOGY

Using emerging digital automation tools, DLA can leverage DOD aggregate manufacturing data, known as the 5Ms – manpower, machine, material, methods, and metrics -- with business analytics to deliver the most efficient solution to the point of need.



STRATEGIC THRUSTS



Active support for a highly connected and collaborative defense manufacturing enterprise



Active support for a strong institutional focus on manufacturability and manufacturing process maturity



DLA RESEARCH & DEVELOPMENT AM PROGRAM

THE CHALLENGE

The challenge is parts obsolescence and long lead times have a direct impact on warfighter readiness.

THE SOLUTION

Integrate AM into the supply chain and broker essential AM data for the appropriate DoD organizations.

IDENTIFY AM CANDIDATES	BUILD MODELS AND TESTS	BROKER TECHNICAL DATA	INTEGRATE w/ SUPPLY CHAIN
<ul style="list-style-type: none"> - Business Case - 3D AM Design - Digital Technical Data - Engineer Reviews - SC Integration - Quality - Cyber Security - Qualified Vendors 			
<p><u>Automated Requirements</u></p> <p>Automate Requirements Identification driven by the Military Services' mission or by DLA's enterprise data analysis</p>	<p><u>Iterative Qualifications</u></p> <p>Normalize Technical Data Packages for AM 3D models and digital manufacturing data to enable procurement and competition</p>	<p><u>Authoritative Data</u></p> <p>Establish a data sharing capability as prescribed by OSD and in joint fashion with the Military Services, for a secure exchange of data to enable AM procurement</p>	<p><u>Repeatable Process</u></p> <p>Implement contracting procedures that address digital manufacturing requirements & drives AM competition, standardization & quality compliance</p>

WARFIGHTER READINESS THE BENEFITS

- Potential reduction of wait times, backorders and part obsolescence to improve readiness
- Potential savings from digital technologies enhancing coordination and manufacturability

INDUSTRY AND WHOLE OF GOVERNMENT PARTNERSHIPS

- Office of the Secretary of Defense (OSD)
- U.S. Military Services
- DLA Major Subordinate Commands (Land and Maritime, Aviation and Troop Support)
- Industry
- Academia



<https://www.dla.mil/Information-Operations/Research-And-Development/>

ACCOMPLISHMENTS & ONGOING EFFORTS

- Military Services' common framework for 3D Model Technical Data Packages that support DLA procurement of AM parts
- Evaluation of innovative quality acceptability techniques to accelerate the introduction of AM parts into the DoD supply chain
- Industry's demonstration of AM powder recycling to reduce waste and cost