

# Engineering in the Supply Chain

End-to-End Supply Chain Intelligence  
Digital Transformation and Risk Mitigation



**Project Performance:  
Critical Information**

**Executive Lead**  
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**Industry/Sector**  
DoD Agency

**RGBSI A&D Advanced Capability**  
Supply Chain Intelligence



*"DLA must continuously identify, assess, report and mitigate threats, vulnerabilities, and disruptions to its global supply chain."*  
+ Defense Logistics Agency (DLA)  
2018 - 2026 Strategic Plan

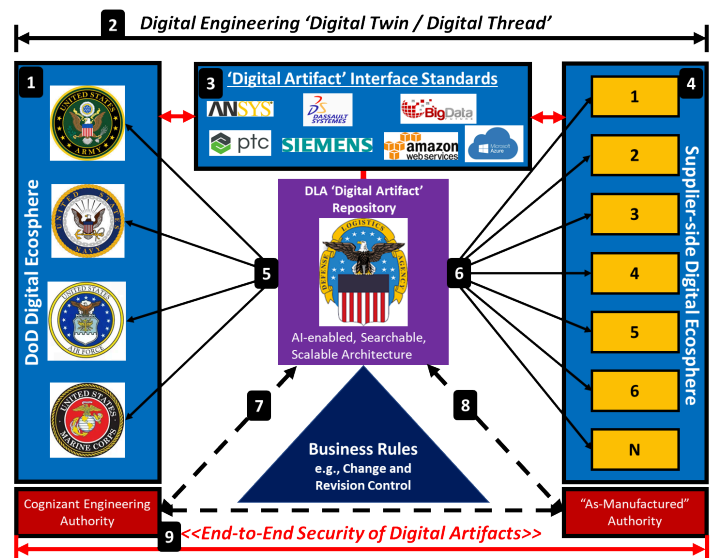
The United States Department of Defense (DoD), including the Air Force, Army, Marine Corps, and Navy, create and fund efforts designed to identify and harness the expected benefits of a fully-integrated "digital enterprise." Internet of Things, Industrial Internet of Things, and Industry 4.0 are a few of the specific efforts that the DoD is pursuing. With increasing demands for OEMs to provide their respective DoD Service end-to-end Digital Twins / Digital Threads, **DoD supply chains have never been more vulnerable to cybersecurity threats, counterfeit parts, and proprietary engineering data theft.**

RGBSI A&D fully understands the requirements associated with ITAR/EAR regulations, internal (intra-firm) processes, data, software, architectures, infrastructures, and governance to harness the power of Model-Based Systems Engineering (MBSE)-enabled concepts of critical significance to the DoD.

## Cybersecurity Documentation from DoD Services



## RGBSI A&D Digital Engineering Artifact Mapping



With demonstrated MBSE expertise across commercial and federal sectors, RGBSI A&D remains committed to optimizing the DoD's supply chain performance by enabling the "digital ecosphere" future-state while protecting its supply chain vulnerabilities. To achieve these objectives, RGBSI A&D has created a **multi-indenture, MBSE approach using DoDAF artifacts and viewpoints** that protects the DoD's supply chain intelligence and national security interests:

1. Must be able **to support secure, multi-directional data flows** regardless of engineering source data standards for decision support / trade space analysis at the metadata level
2. Must **align with individual Services' MBSE strategies** for new weapon system development and major system / sub-system level modernization efforts
3. Must be capable of **providing real-time engineering and virtual product data artifacts in the usable form of Technical Data Packages** that accommodates the supplier's technology-enabled capabilities

Addressing the collective importance of engineering in the supply chain enables a systematic address of critical sub-topics such as **AI-enabled Supply Chain Intelligence, Model-based Procurement, Supply Chain Cybersecurity, Non-Linear Risk Quantification, and more.** With our integrated approach, RGBSI A&D has demonstrated our enduring commitment to DoD objectives through digital engineering, assessing and mitigating supply chain risk, and facilitating the DoD's digital transformation towards an integrated future-state.