DoD seeks to transform the state of practice by addressing the following challenges:

- The DoD has a linear acquisition process that is not agile or resilient
- Workforce uses stove-piped infrastructure, environments, and data sources to support various activities throughout the life-cycle
- Communication, collaboration, and decisions are through static disconnected documents and subject to interpretation
- Current practices can’t keep pace with technology innovation

A shift is already underway within DoD towards a digital engineering ecosystem that consists of five goals:

1. **Formalize the development, integration, and use of models to inform enterprise and program decision making**

2. **Provide an enduring authoritative source of truth**

3. **Incorporate technological innovation to link digital models of the actual system with the physical system in the real world**

4. **Establish supporting infrastructure and environments to perform activities, collaborate, and communicate across stakeholders**

5. **Transform a culture and workforce that adopts and supports Digital Engineering across the lifecycle**

**Current Digital Engineering Activities**

The Office of Deputy Assistant Secretary of Defense for Systems Engineering (ODASD(SE)) is advancing the state of practice of Digital Engineering within DoD, industry, and academia.

**Policy**
- DoD 5000.02, Section 9: Modeling and Simulation

**Guidance**
- Defense Acquisition Guidebook Chapter 3
- DASD(SE) Website and Digital Engineering Fundamentals
- Digital System Model Taxonomy
- Digital Engineering Strategy – exp. Dec 2017

**Collaborations**
- Leads the Digital Engineering Working Group (DEWG)
- Explores, innovates and implements DE across engineering
- Collaborates with the US Armed Services, Industry, Academia
- Collaborates with NASA to apply DE on the NASA Sounding Rocket Program’s Pathfinder effort
- INCOSE Digitalartifacts Challenge Team

**Education and Training**
- DAU - Continuous Learning Engineering Modules (CLE 011)

**Science and Technology Investments**
- Engineered Resilient Systems (ERS)
- Computational Research and Engineering Acquisition Tools and Environments (CREATE™)
- Sponsors research through the DoD Systems Engineering Research Center (SERC), a University-Affiliated Research Center

**References**

For more information, contact: Mrs. Philomena Zimmerman | (o) 571.372.6695 | email: philomena.m.zimmerman.civ@mail.mil