

Distributed Ledger Technology (DLT)/Blockchain provides an auditable, unified record of EMS utilization decisions/transactions to support near real-time enforcement and interference resolution, intelligent referenced & flexible models for DoD spectrum sharing and consumption. Specifically enabling improvements in operational, administrative, security, & logistical readiness for targeted DoD entities. Enhancing validation, verification, and trust of information/data provided by users of EMS-related databases leveraging tamper evident, cryptographically secure, anomaly and threat detection risk mitigation protocols. This solution supports a lower total cost of operations, while advancing near real-time automated EMS utilization decisions & execution of those decisions, with the use of machine learning algorithms and smart contracts. Additionally, Blockchain enables identification and execution of ongoing operational continuity in the support of DoD EMS allocation missions.