The 2019 C3 IR&D TIM will address the following areas of significant interest to the Air Force:

Multi-Domain Command & Control (MDC2):

o   Multi-Domain Planning, Execution & Assessment technologies
o   Resilient, distributed C2 capabilities
o   Advanced C2 Battle Management capabilities
o   Coordinated and synchronized ElectroMagnetic Spectrum Operations (EMSO) technologies

Assured Communications (MDC2 enabler):

o   Advanced networked technologies that provide a seamless, agile, resilient and secure network across the enterprise
o   Tactical information technologies for the disadvantaged user
o   Techniques and technologies that promote communication systems with open interfaces and interoperability

Nuclear C3:

o   Advanced survivable and enduring Beyond Line of Sight (BLOS) communications technologies for alternate communications paths in pre-trans-& post nuclear events
o   Modernized modeling & simulation (M&S) capabilities for signal propagation prediction and Wargaming COA development in nuclear scenarios
o   Novel technologies for advanced secure, encrypted communications
o   Architectural foundations for nuclear C3 to include real-time monitoring capability for NC3 systems