



# Emerging Capability & Prototyping Focus Areas (2017)



## Asymmetric Force Application

Asymmetric force application is the use of nontraditional technologies, tactics, and weapons to provide a clear military advantage to our forces during maneuver and engagement operations.

## Electromagnetic Spectrum Agility

The increasingly wireless nature of the global economy, coupled with advances in analog-to-digital conversion, cognitive radios, smart antennas, and increased transmitter-receiver diversity, present opportunities to develop new capabilities that sustain and extend our military advantage in the EMS domain. These new capabilities will also mitigate the impact of new challenges, including an increasingly cluttered operational EMS environment.

## Autonomous Systems

Autonomous systems are a "capability (or a set of capabilities) that enables a particular action of a system to be automatic or, within programmed boundaries, 'self-governing". Autonomous systems can improve our capability without increasing capacity by better coordinating and synchronizing current sensors and weapon systems and by maximizing the efficiency of both.

## Information Operations and Analytics

Exploit commercial technology advancements in information collection and management to provide the Joint Force enhanced communications and Situational Awareness within their Area of Responsibility to disrupt and delay adversary forces from offensive operations, counter their ability to use deceptive messaging to influence U.S. / Coalition operations and develop capabilities to counter adversary cyber and C2 communications.