



Weapons Technologies Community of Interest



Strategic Vision – Affordably achieve and sustain lethality overmatch through assured delivery combined with overwhelming effects

Future Weapons Needs

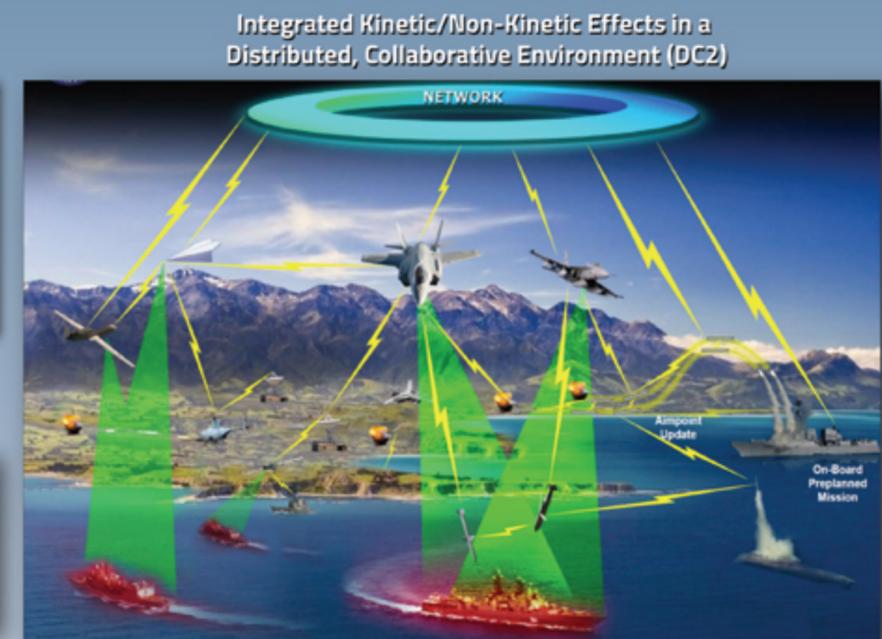
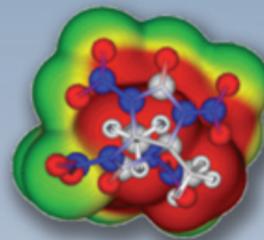
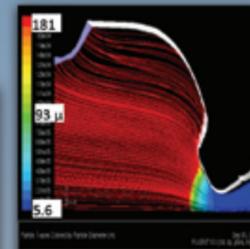
- Greater Range
- Ability to navigate in GPS Jammed and Denied Environment
- Greater (to include non-lethal) effects

Focus Area/Major Thrusts

- Ordnance - Enhanced (usually more) Performance in Constrained Volume in extreme environments (both Warheads and Penetrators)
- Guidance, Navigation, and Control and Data Links – Highly maneuverable weapons operating in GPS jammed and denied environments. Secure networks for communications.
- Propulsion - Higher Energy, Lower Sensitivity Propellants to increase range of rockets, missile and munitions.
- Directed Energy – High Power Lasers – Higher power efficient lasers with increased beam control.
- Directed Energy – High Power RF – Compact, efficient micro /millimeter-wave sources with pulse repetition rates.
- Non-Lethal – Mechanisms to reversibly incapacitate.
- Underwater Weapons – Same challenges as Ordnance, GN&C-DL, and propulsion but from underwater perspective.
- Integrated Weapons Demonstrators – Electromagnetic Gun, Hyper Velocity Projectile, Extended Range Cannon Artillery, Low-Cost –Tactical Extended Range Missile, GBU-X, Flex Weapons, Small Advanced Capabilities Missile.

Impact on Capability Needs

- Warheads – Novel mechanisms combined with new materials.
- Energetics – Focus on Insensitive Munitions, Disruptive Energetics.
- Directed Energy – High Energy Laser Sources, Beam Control, Integrated Demonstrators (LAWs, HEL-MD, etc.)
- GPS Jammed/Denied – Expanded focus into non-traditional navigation methods.
- Distributed, Collaborative and Cooperative (DC2) Engagements manned/unmanned teaming of weapons.



Success Stories

DOD S&T inside current Weapons and demonstrating future possibilities

- Small, Medium and Large Caliber Gun-launched Munitions
- Anti-ship, air to air, tactical missiles and air to ground ordnance
- Ballistic Missile Defense
- High Energy Laser Defeat of intended targets

Focus Going Forward

Weapon Technologies that Provide Offset Capability

- DOD S&T inside current Weapons and demonstrating future possibilities
- Small, Medium and Large Caliber Gun-launched Munitions
- Anti-ship, air to air, tactical missiles and air to ground ordnance

Engagement Opportunities with Industry

- DOD S&T inside current Weapons and demonstrating future possibilities
- Small, Medium and Large Caliber Gun-launched Munitions
- Anti-ship, air to air, tactical missiles and air to ground ordnance

