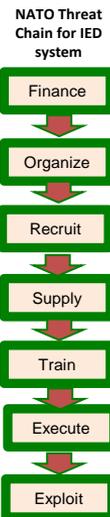
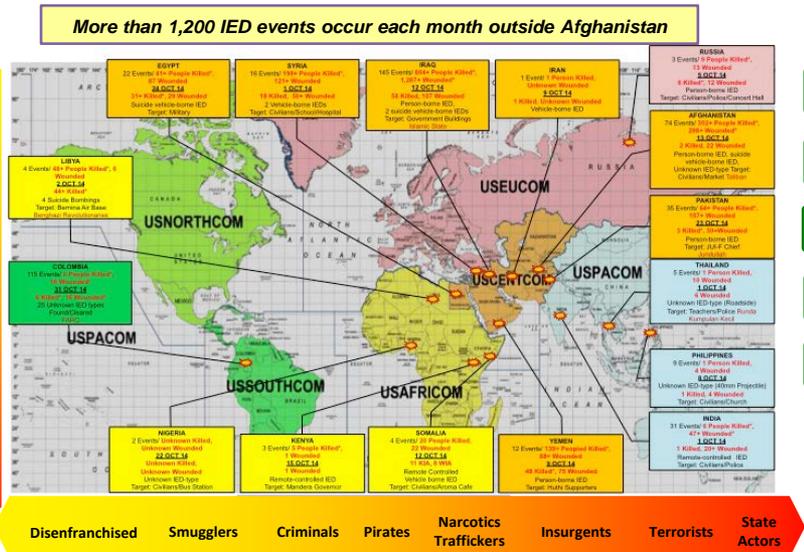




Counter-IED Community of Interest

The Counter Improvised Explosive Device (IED) S&T COI was formed to encourage multi-agency coordination and collaboration in cross-cutting science and technology focus areas that have particular benefit addressing the proliferating and enduring challenge presented by IEDs. The COI concentrates on fostering the bonds between the Joint IED Defeat Organization (JIEDDO) and the DoD Enterprise by improving the visibility of operational needs and technology gaps, and identifying alignment of S&T capabilities, experts, facilities, and programs/projects with these gaps.

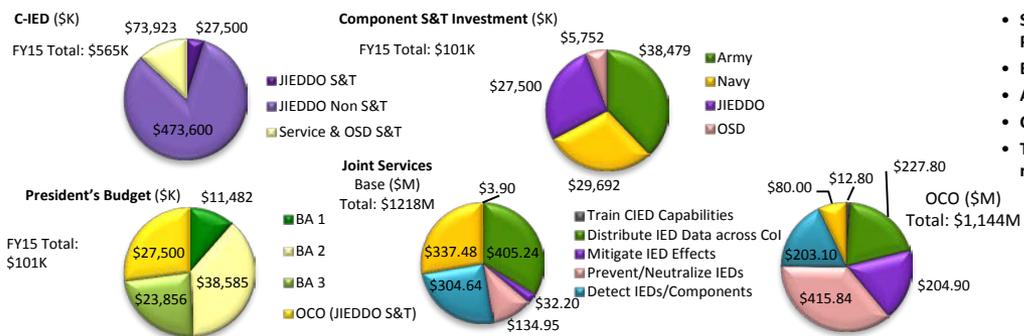
- Range of Military Operations
- Humanitarian Assist/ Disaster Relief (HA/DR)
- Non-combatant Evacuation (NEO)
- Foreign Internal Defense (FID)
- Irregular Warfare (IR)
- Major Combat Operations (MCO)



C-IED COI Thrust Areas

- **Identify Threat Networks that Employ and/or Facilitate IEDs**
Detection & predictive analysis of threat networks and their functions through the analysis of intelligence, network activities, exploitation, and signatures.
- **Detect IEDs and/or IED Components**
Detection of IEDs in every operational environment (mounted, dismounted, in water, or from the air) as rapidly as possible and at distances beyond the serious injury zone of each device. Various types of sensors, as well as the capabilities of humans and animals, may be used to detect any of the common components of an IED: main charge, initiator, switch, container, or power source.
- **Prevent and/or Neutralize IEDs**
Neutralization can include: pre-detonation, render safe, and disposal of the IED or the disruption of the detonation command signals. Where neutralization is impossible or impractical, methods such as disabling the trigger mechanism or preventing emplacement of the device are effective alternatives.
- **Mitigate IED Effects**
Maximize the survivability of personnel, facilities and equipment by mitigating the blast and fragmentation effects of IEDs.
- **Distribute IED Related Data across the Community of Interest**
Synchronization of intelligence and operational forces by sharing appropriate all-source information and intelligence up and down the chain of command from the strategic to the tactical level, across Federal Department and Agencies and with our allies and partner nations. IED related data includes, but is not limited to, significant event reports, post blast analysis, forensic and biometric data, trends analysis, C-IED capability assessments, crime pattern analysis, network analysis, intelligence products and reports and new innovative analytic techniques.
- **Train C-IED Capabilities**
Employing relevant and effective C-IED tactics, techniques and procedures by rapidly developing, defining, and implementing materiel C-IED training tools, including standards, and integrating into appropriate Service, Joint, and DoD concepts, policy and doctrine.

C-IED Investment Profile PB15 FY 2015



Opportunities to Develop/Enhance the Following Technology Areas:

- Identify and track network activities
- Capture, catalog & Identify IED component signatures
- Collection and analysis of biometric, forensic and DOMEX data
- Detect IEDs from a safe stand-off distance
- Neutralize/pre-detonate IEDs with dismounted, mounted from aircraft
- Distribute IED related data across the Community of Interest
- Detect IEDs while dismounted, mounted, and from the air
- Detect waterborne IEDs
- Neutralize waterborne IEDs
- Detect HME
- Disable IEDs in multiple environments
- Mitigate the effects of IED attacks while mounted or dismounted

Technologies that Support Improved C-IED Capabilities

- Sensor Fusion & Processing
- Explosive Detection
- Autonomous Systems
- Chemical Spectroscopy
- Traumatic injury response
- Knowledge Management
- Electronic Attack/Jamming
- Advanced Armor
- Robotics
- UAVs
- Forensics/Biometrics
- Human Cultural Behavior
- Hyperspectral Imaging
- ISR Sensors
- Infrared Imaging
- Lasers
- Insurgent Network Analysis
- Tagging, Tracking & Locating
- Electronic Support/SIGINT
- Advanced Electronics
- RF Directed Energy

C-IED S&T COI Membership Bold Denotes Service Agency Principal Member	
ASD(R&E)/RD: Dr. Karl Dahlhauser (Co-Chair)	NVSD: Dr. Mike Grove
JIEDDO: Maureen Munley (Co-Chair)	ONR: Lee Mastroianni
SAF/AQR: vacant	OSTP: Dr. Matt Heavner
Joint Staff: LTC William Sellers	DHS: Joe Foster
MDA: vacant	OSD – JRAC: Chris O'Donnell
DTRA: Dr. Donald Crouce	DARPA: vacant
Army ERDC: Dr. Bert Davis	CTTSO: Lou Wasserzug
Naval C-IED Knowledge Network: Debra Powers	JSEOD: Keith Plumadore
DASA(R&T): Matt Donohue	UXOCOE: Bill Windsor
Army CERDEC: Henry Muller	Army TARDEC: Andrew Culkin
Army SMDC: Dr. Mark Rader	ARL: Kelly Sherbondy
USMC MCSC SIAT: Dave Karcher	AFRL: 1st Lt Michael Duenes
USMC MCCDC CDD FPID: Maj Steven Lucas	Army NVSD: Dr. Steven Bishop