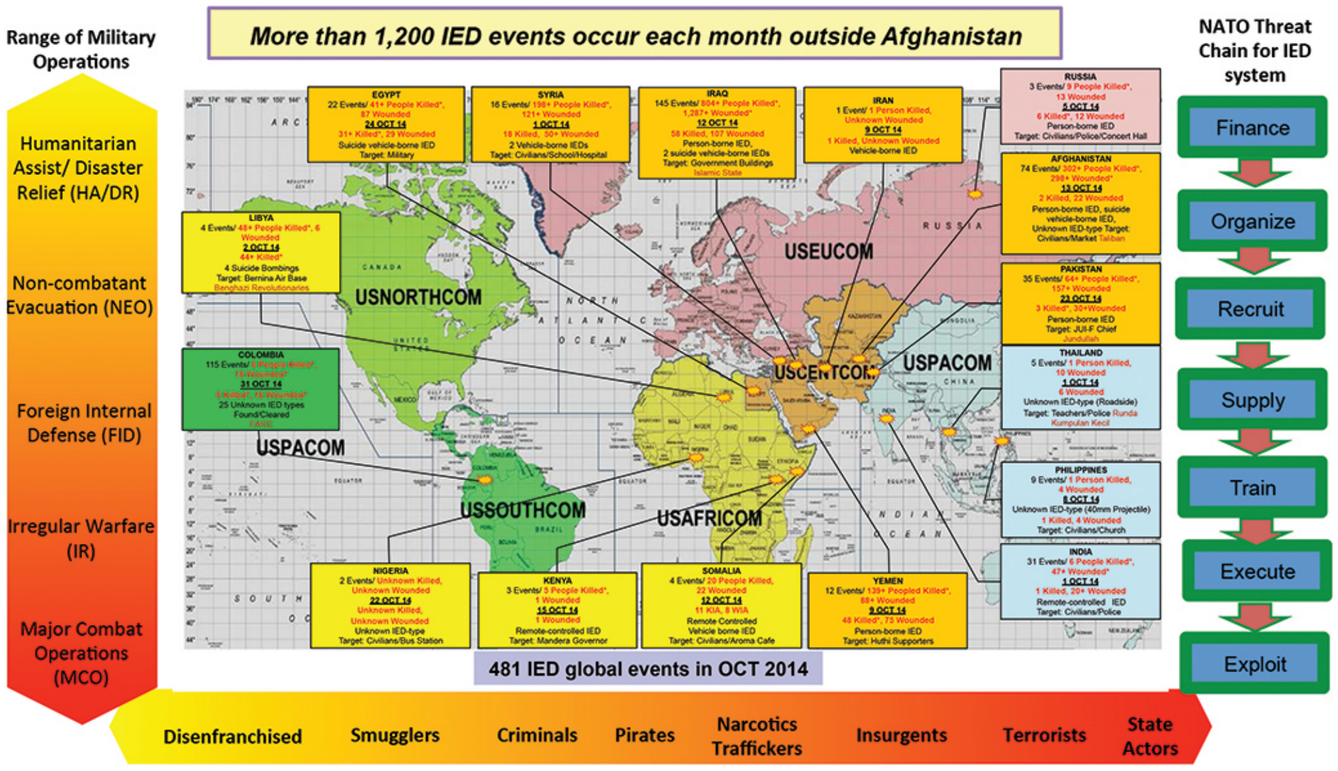
Counter-IED Community of Interest

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 S&T 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.



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.

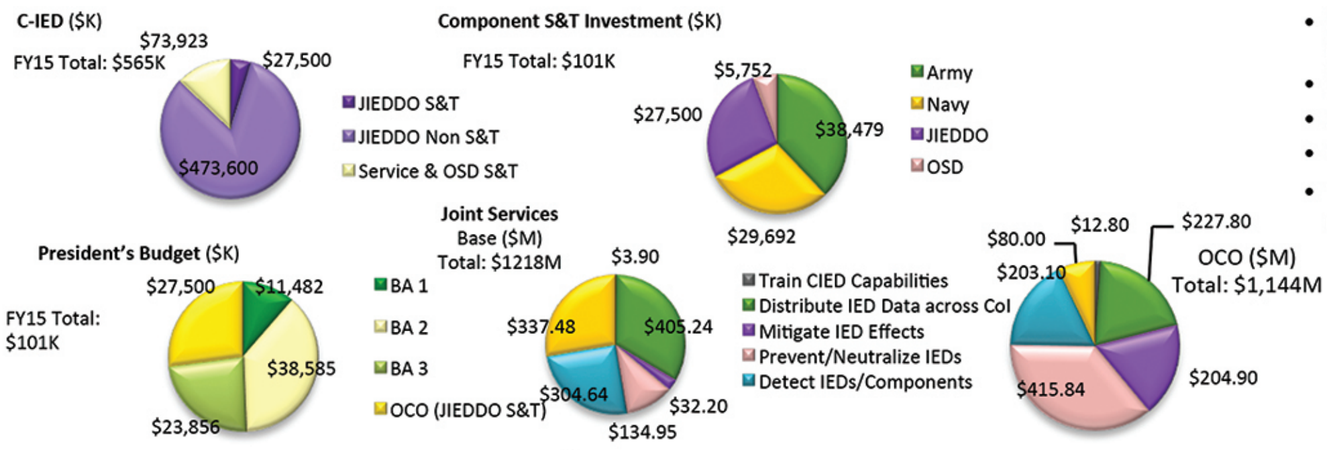
- Prevent and/or Neutralize IEDs
Neutralization can include: pre-detonation, render safe, and disposal of the IED or the disruption of the detonation command signals. Where neutralization is impossible or impractical, methods such as disabling the trigger mechanism or preventing emplacement of the device 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



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**

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

C-IED S&T COI Membership
Bold Denotes Service Agency Principal Member

ASD(R&E)/RD: Dr. Karl Dahlhauser (Co-Chair)
JIEDDO: Maureen Munley (Co-Chair)
SAF/AQR: vacant
Joint Staff: LTC William Sellers
MDA: vacant
DTRA: Dr. DonaldCronce
Army ERDC:Dr. Bert Davis
Naval C-IED Knowledge Network: Debra Powers
DASA(R&T):Matt Donohue
Army CERDEC:Henry Muller
Army SMDC: Dr. Mark Rader
USMC MCSC SIAT:Dave Karcher
USMC MCCDC CDD FPID: Maj Steven Lucas

NVESD: Dr. Mike Grove
ONR: Lee Mastroianni
OSTP: Dr. Reed Skaggs
DHS: Joe Foster
OSD – JRAC: Chris O'Donnell
DARPA:vacant
CTTSO: Lou Wasserzug
JSEOD: Keith Plumadore
UXOCOE:Bill Windsor
Army TARDEC: Andrew Culkin
ARL: Kelly Sherbondy
AFRL:1st Lt Michael Duenes
NGIC:RandyScholl