Helping Warfighters adapt

Joint Improvised-Threat Defeat Agency
Technology Overview Brief

Global EOD Symposium and Exhibition 2016

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The overall classification of this briefing is UNCLASSIFIED
Enduring Counter IED Capabilities

- Identify IED Networks
- Detect IEDs and/or IED Components
- Prevent and/or Neutralize IEDs
- Mitigate IED Effects
- Distribute Data across IED Spectrum
- Train Counter-IED Capabilities

Resource Decisions Focused on Closing Gaps Aligned to Strategic Priorities — Solutions Delivered in the Latest Time of Value
## Technology Focus Areas

<table>
<thead>
<tr>
<th>Standoff Detection</th>
<th>Counter VBIED</th>
<th>Tunnel Detection &amp; Defeat</th>
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</thead>
<tbody>
<tr>
<td>Miniaturization &amp; integration of sensors</td>
<td>ECM for advanced wireless signals &amp; techniques</td>
<td>PED for integrated sensors</td>
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<td>Vehicle attached IEDs</td>
<td>Virtual Advise &amp; Assist</td>
<td>Data Analytics</td>
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<td>Situational Understanding in A2AD environments</td>
<td>Remote neutralization of HME and pre-cursors</td>
<td>Pre-detonation capabilities</td>
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<td>Identifying explosive threats within structures</td>
<td>Detecting and defeating Small UAS (RCMA)</td>
<td>Detecting and defeating GPS jamming signals</td>
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Future capabilities must be: Scalable – Affordable – Adaptable – Expeditionary – Domestic Application – Whole-of-Government Approach
Technology Areas of Interest

ar-ti-fi-cial in-tel-li-gence
noun
noun: artificial intelligence; noun: AI
1. the theory and development of computer systems able to perform tasks that normally require human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.

Directed Energy & Lasers

nan-o-tech-nol-o-gy
ˌnanōˌtekˈnäləjē/
noun
noun: nanotechnology
1. the branch of technology that deals with dimensions and tolerances of less than 100 nanometers, especially the manipulation of individual atoms and molecules.

Advanced Robotics

JIDA wants to leverage technology advances for the 3rd offset to address improvised threats.
Emerging Technologies as Threats

Flexible Electronics

3-D Printing for the Masses

Automated RCMAs (GPS guided)

Sensitive Touch Technology

Software Defined Radios

Energetic Metals

Frequency Hopping