

Joint Improvised-Threat Defeat Agency Technology Overview Brief

Global EOD Symposium and Exhibition 2016

Mr. Jon Young
J8, Division Chief



HELPING WARFIGHTERS ADAPT



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



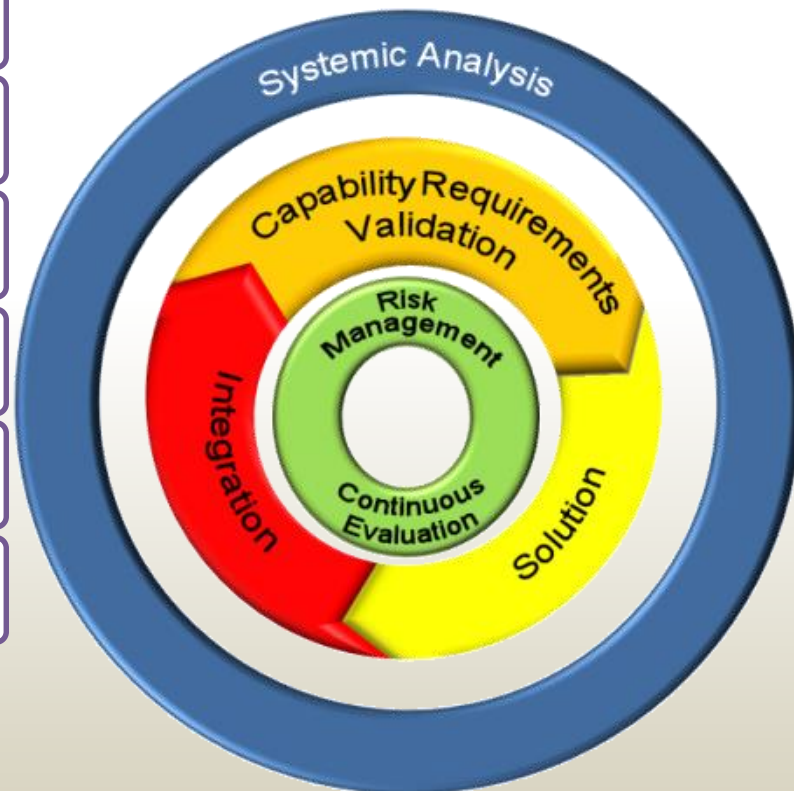
Mitigate IED Effects



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



Standoff Detection



Counter VBIED



Tunnel Detection & Defeat



Miniaturization & integration of sensors



ECM for advanced wireless signals & techniques



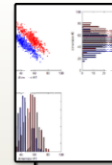
PED for integrated sensors



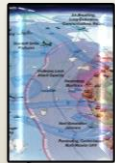
Vehicle attached IEDs



Virtual Advise & Assist



Data Analytics



Situational Understanding in A2AD environments



Remote neutralization of HME and pre-cursors



Pre-detonation capabilities



Identifying explosive threats within structures



Detecting and defeating Small UAS (RCMA)



Detecting and defeating GPS jamming signals

Future capabilities must be:

Scalable – Affordable – Adaptable – Expeditionary – Domestic Application – Whole-of-Government Approach



Technology Areas of Interest

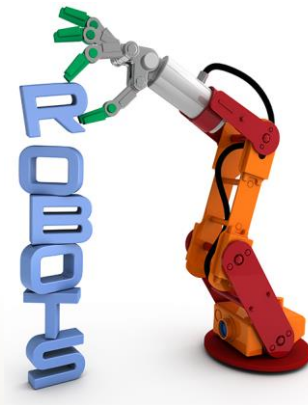


ar-ti-fi-cial in-tel-li-gence

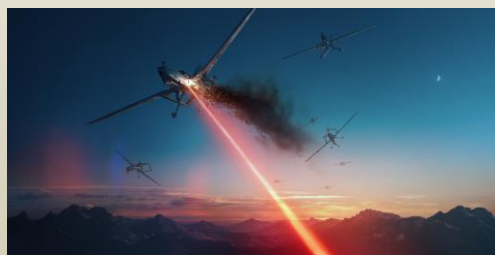
noun

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.



Advanced Robotics



Directed Energy & Lasers

nan-o-tech-nol-o-gy

,nanō,tek'näləjē/

noun

noun: **nanotechnology**

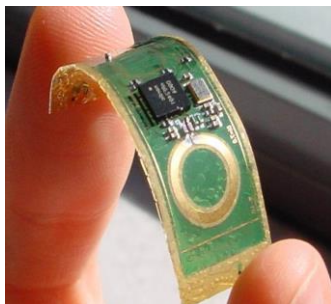
1.the branch of technology that deals with dimensions and tolerances of less than 100 nanometers, especially the manipulation of individual atoms and molecules.



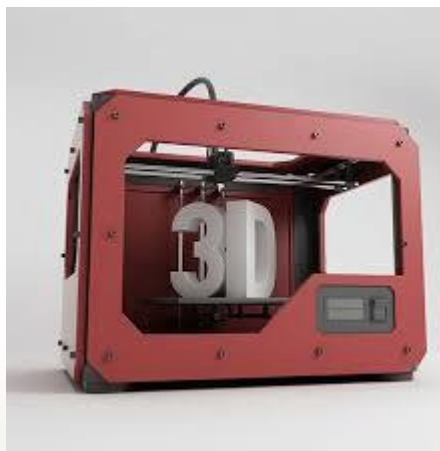
JIDA wants to leverage technology advances for the 3rd offset to address improvised threats.



Emerging Technologies as Threats



Flexible Electronics



3-D Printing for the Masses



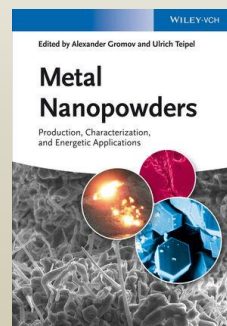
Software Defined Radios



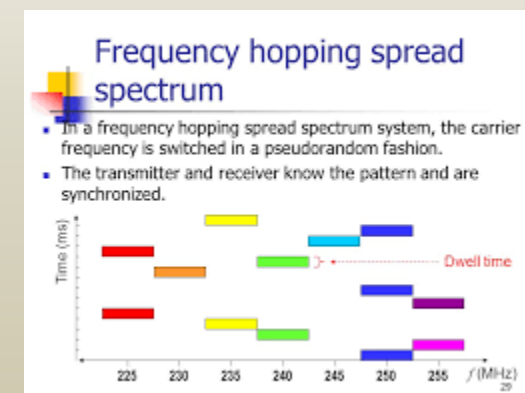
Automated RCMA's (GPS guided)



Sensitive Touch Technology



Energetic Metals



Frequency Hopping

