

USEUCOM Science & Technology,



Science and Technology Vision

An innovative team of experts pursuing technological solutions that sustain and further develop the forces that underpin enduring stability and peace in Europe and Eurasia

“Leveraging technology to make us stronger together”

Michael McGuinness
Deputy Science Advisor,
ECJ8-C, S&T Branch



EUCOM J8-C, Science & Technology *Branch*

Sourced by RDECOM and NAVSEA
Funded by RDECOM, NAVSEA, and OSD

Fully integrated as EUCOM AOs



James Wiltz
EUCOM Science Advisor



Joe Fagan
WeSTTCaP OM
JBADS Inc 2 OM
EARTHAM OM
TRUC OM



Wayne Weishaar
Senior Naval
Engineer



Mike McGuinness
Deputy Science
Advisor



Steve Spohn
Deputy Science
Advisor (Fwd) /
ACE JCTD OM



European Security Environment

Strategic Context

- NATO
- Russian Aggression
- Fragile/Failing States on the Periphery
- Political
- Economic
- Social
- Arctic

Opportunities

- Credible U.S. Deterrence
- Support DOD C2 Reorg
- Enable NATO
- Increased Intel Sharing
- Defense Capability Development
- Comprehensive Security Partnerships
- Interagency Coordination
- CCMD Coordination
- Increased Relationships with European Security Orgs

3 - Threats

- Russia
- Terrorism
- Iran and Proxies

5 - Trends

- Continued Russian Adversarial Posture
- Migrant and Refugee Crisis
- Middle East and North Africa Instability
- European Insecurity
- Forces of Fragmentation

5 - Challenges

- Transregional Concerns
- Defending Israel
- Turkey's Strategic Environment
- Capability Gaps
- Unresolved Conflicts



EUCOM S&T Tools (1/4)

- **EUCOM Science and Technology Challenges**
 - Based on the IPL, Commanders Priorities and component requirements, EUCOM S&T Office creates an **unclassified** list of technology needs
 - Organized by technological area for distribution to DoD labs
- **EUCOM S&T Technical Interchange Meetings**
 - Discussion of specific topics related to the operational challenges and capability gaps within the combatant command Area of Responsibility (AOR).
 - Allow a technical exchange between the combatant command staff and product developers.



EUCOM S&T Tools (2/4)

- **Strategic Capabilities Office (SCO)**
 - OSD SCO expanded their mission areas to Russia in 2015.
 - SCO technologies are vetted by the COCOMs (PACOM and EUCOM) to determine operational utility before development.
 - EUCOM S&T is the lead for interface between SCO and EUCOM
- **DARPA, NASA,** and other FFRDC labs
 - EUCOM S&T is the primary interface to DARPA, FFRDCs, DoD labs and the ST community.
 - This relationship has led to influence in the development of solutions that serve EUCOM needs.



EUCOM S&T Tools (3/4)

- **Joint Capability Technology Demonstrations/Enabling Technologies (ET) / Rapid Reaction Technology Office**
 - EUCOMs focus in on developing and demonstrating technologies that serves a CCMD need which may be outside current programs.
 - Focus on ET's are less mature solutions that may lead to a JCTD
- **Coalition Warfare Program/CWP Initiatives**
 - EUCOM uniquely co located with NATO partner nations with significant defense industry development capability
 - Annually the majority of selected initiatives are with NATO nation
- **DTRA and other Agency Technical Demonstrations**
 - Agency Tech Demos have been conducted for the past 5 years.
 - CCMD provides an Operational Manager to facilitate interface with EUCOM Staff, components and partner nations



EUCOM S&T Tools (4/4)

- **Warfighter Laboratory Initiative Fund**
 - O&M funding for activities to support field experiments and demonstrations to take concepts from the paper to the real world
- **NATO Science and Technology Organizations**
 - NATO Systems Concepts and Integration
 - NATO Centers of Excellence
- **Joint Multinational Training Center**
 - Forces from the US and partner nations routinely participate in training and exercises at JMTC
 - Prototypes can be inserted for testing
 - Personnel can visit exercises to witness current needs/challenges
 - Best venue for interoperability issues



EUCOM S&T Challenges

- Integrated Air and Missile Defense
- Anti Access / Area Denial (A2/AD)
- Intelligence, Surveillance, Reconnaissance (ISR)
- **Space Resiliency**
- **Counter- Unmanned Aerial Systems**
- Cyber
- Electronic Spectrum Management
- Command and Control Interoperability
- **Communications**
- Maritime Surface and Subsurface Operations
- **Joint Reception, Staging, Onward-movement and Integration (JRSO&I)**



Points of Contact

- James Wiltz, EUCOM Chief Science Advisor
james.r.wiltz.civ@mail.mil
+49 (711) 680-8922
 - Mike McGuinness, Deputy Science Advisor
michael.t.mcguinness.civ@mail.mil
+49 (711) 680-7095
 - Joe Fagan, TaCBRD and Keystone Operational Manager
joe.e.fagan.civ@mail.mil
+49 (711) 680-8955
 - Wayne Weishaar, Senior Naval Science Advisor
wayne.g.weishaar.civ@mail.mil
+49 (711) 680-6873
 - Steve Spehn, Deputy Science Advisor (US)
stephen.l.spehn.civ@mail.mil
+1 (256) 961-7095
 - **EUCOM S&T Group email:**
 - **eucom.stuttgart.ecj5-8.list.ecj8-q-group@mail.mil**

