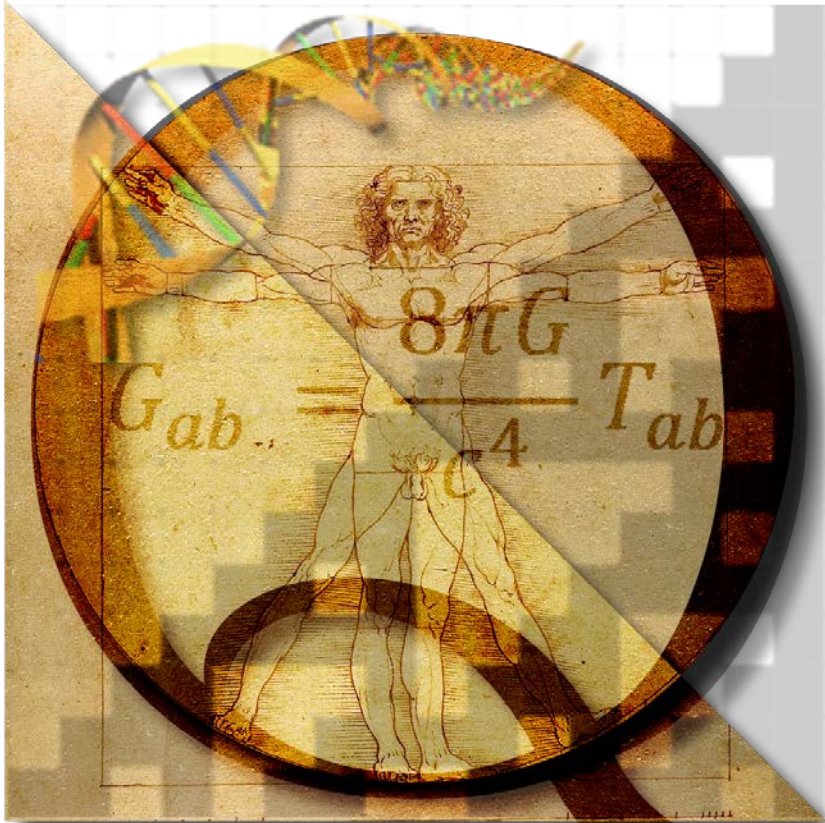


USEUCOM Science & Technology, ECJ8-Q



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”

James Wiltz
Science Advisor, ECJ8-Q

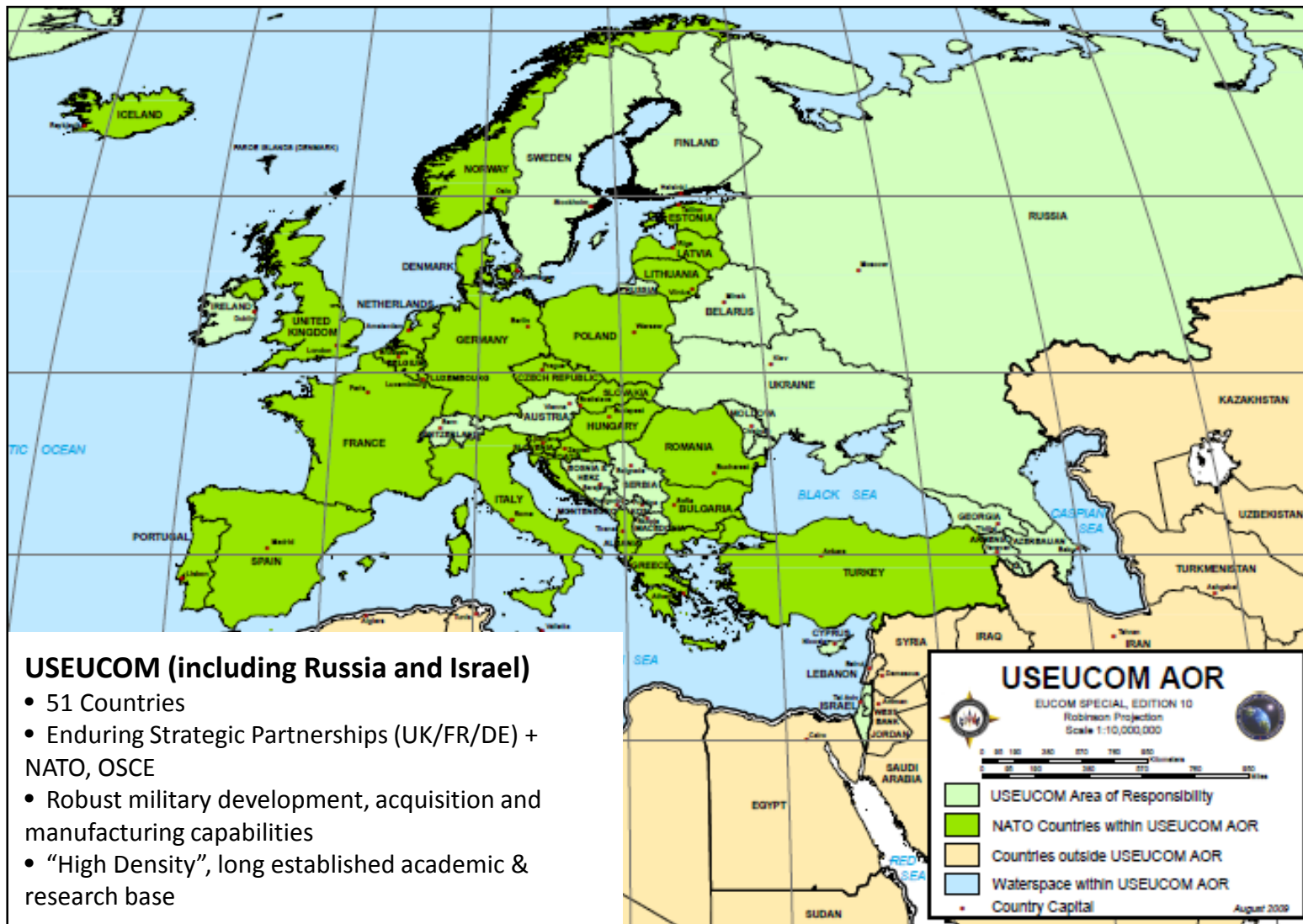


United States
European Command
“Stronger Together”

UNCLASSIFIED

ECJ8Q - 26 March 2015

USEUCOM AOR



United States
European Command
“Stronger Together”

UNCLASSIFIED

ECJ8Q - 26 March 2015

Trans-Atlantic Linkages



United States
European Command
"Stronger Together"

USEUCOM Challenges

Eastern Flank

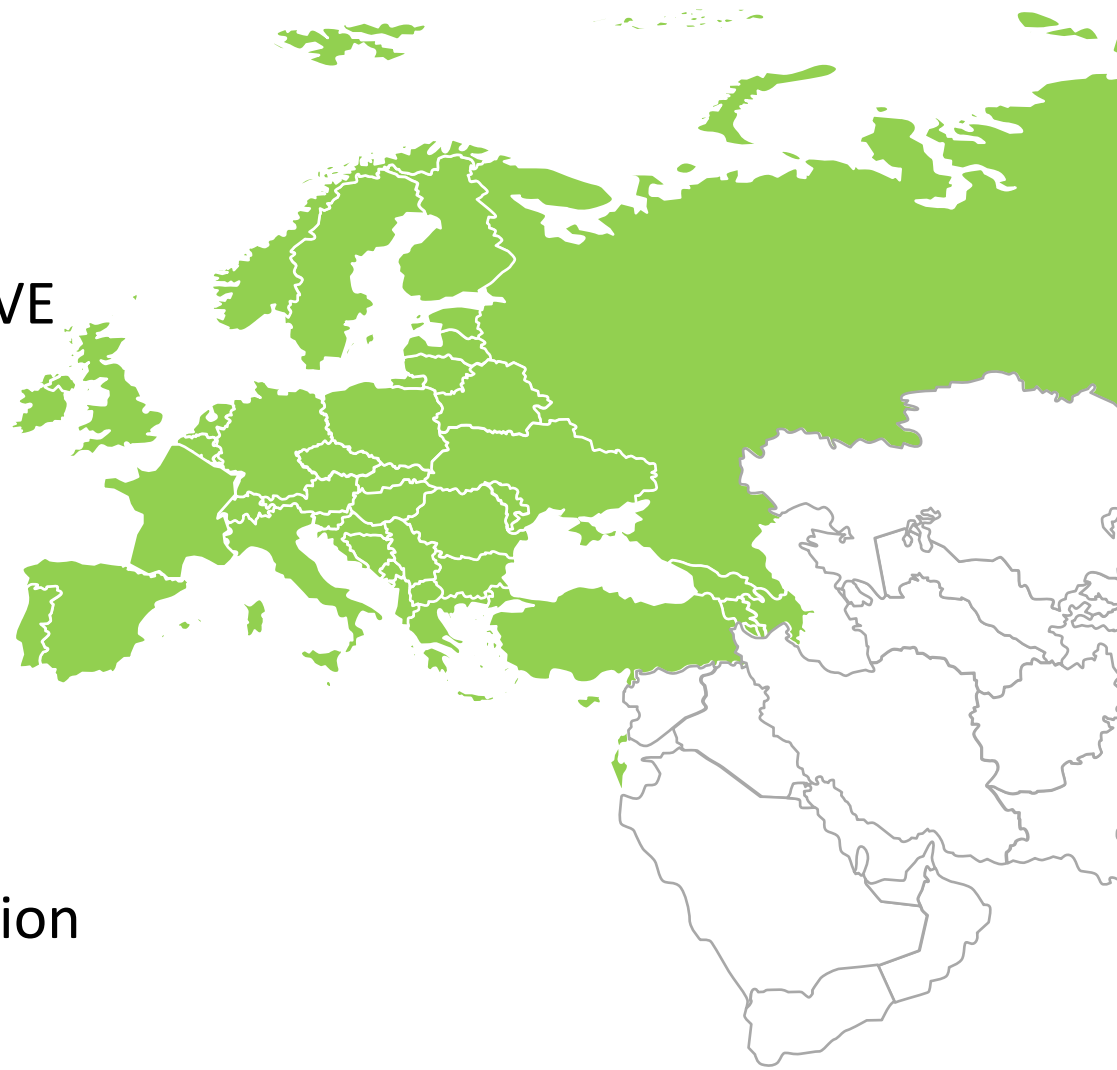
- Revanchist Russia
- Russian invasion of Ukraine
- Operation ATLANTIC RESOLVE

Southern Flank

- ISIL, Foreign Fighter Flow
- Peshmerga re-supply
- Illicit trafficking/migration

Northern Flank

- Arctic expansion/militarization



United States
European Command
"Stronger Together"

UNCLASSIFIED

ECJ8Q - 26 March 2015

4

USEUCOM Challenges

Eastern Flank

- Revanchist Russia
- Russian invasion of Ukraine
- Operation ATLANTIC RESOLVE



United States
European Command
"Stronger Together"

UNCLASSIFIED

ECJ8Q - 26 March 2015

USEUCOM Challenges

Southern Flank

- ISIL, Foreign Fighter Flow
- Peshmerga re-supply
- Illicit trafficking/migration



United States
European Command
"Stronger Together"

UNCLASSIFIED

ECJ8Q - 26 March 2015

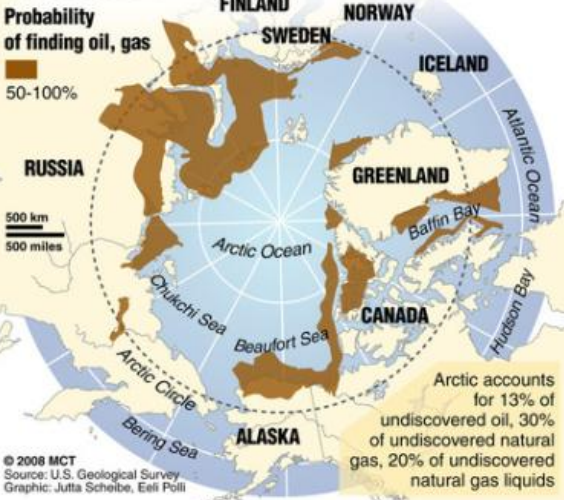
USEUCOM Challenges

Northern Flank

- Arctic expansion/militarization

Oil and gas in the Arctic

Area north of the Arctic Circle has an estimated 90 billion barrels of undiscovered oil.



United States
European Command
"Stronger Together"

UNCLASSIFIED

ECJ8Q - 26 March 2015

USEUCOM Commander's Priorities

- **Enable the NATO Alliance** to assure, deter, and defend itself against emergent threats
- **Deter aggression** and malign influence towards Allies and partners across USEUCOM AOR.
- **Ensure** postured and ready forces and strategic **access** to execute USEUCOM's high priority contingency plans and to support other combatant commands.
- Preserve out strategic **partnerships** by:
 - Sustaining relationships with highly capable Allies
 - **Strengthening** recently developed **partner capacity, capability, and interoperability**.
 - Maintaining regional stability and security.
- **Counter Transnational threats** by working with and through allies, partners, the interagency, other combatant command and public-private partnerships.
- Focus on key relationships by:
 - Enhancing security on Europe's **Eastern Flank**.
 - Preparing forward, in, and for the **Levant and Mediterranean**.
 - Strengthening ties with emerging Alliance leaders.
 - Seeking greater cooperation for military support to civil authorities that enable the peaceful opening of the **Arctic**.



Recent /Current S&T Programs Supporting EUCOM

Keystone Demonstration 20 Mar, 2015

- Physical Security Enterprise and Analysis Group (PSEAG)-funded
- Joint initiative establishing automated information sharing across “stove-piped” unclassified emergency management and force protection applications
- Shares info among the USAG Stuttgart community / host nation first responders
- Consists of middleware configured to complement existing systems
- Quickly and accurately disseminates time-critical incident

Transatlantic Collaborative Biological Resiliency Demonstration (TaCBRD)

OpDemo 18-27 Feb 2015

- Enhances Poland’s ability to recover from an anthrax incident
- DTRA-funded
- Material (digital dashboard), and non-material (processes/procedures/TTXs) solution
- OpDemo involved US/Polish personnel in Garmisch, Germany and Poznan, Poland

Arctic Collaborative Environment (ACE) JCTD

- Increased awareness of climatic and environmental changes in Arctic
- Long-term environmental planning
- Cooperation & coordination (international, regional, & local)



United States
European Command
"Stronger Together"

UNCLASSIFIED

ECJ8Q - 26 March 2015

USEUCOM S&T Challenges (1/4)

- **Ballistic Missile Defense** : Improve the ability to defend against Large Scale Attacks, Dense Raid Sizes, and Structured Attacks
 - **Sensors-** Improve sensing capability of indications and warning of BMD attack, left of launch detection.
 - **Trackers:** The ability to track exponentially greater number of targets with increased precision.
 - **Defeat:** The ability to engage a greater number of targets with at lower cost.



USEUCOM S&T Challenges (2/4)

- **Anti Access / Area Denial (A2/AD):** Anti-access (A2) strategies aim to prevent US forces entry into a theater of operations. Area-denial (AD) operations aim to prevent their freedom of action in the more narrow confines of the area under an enemy's direct control.
 - Enhance capability to conduct “standard” operations in an A2AD environment
 - Position, Navigation & Timing
 - Command and Control
 - A2AD Defeat



USEUCOM S&T Challenges (3/4)

- **Intelligence, Surveillance, Reconnaissance:** Improve the ability to detect, locate and monitor transnational threats and increase the availability of persistent ISR assets
 - Improve tagging, tracking, locating sensors to allow them to be maintained and deployed at a COCOM level
 - Improve availability of persistent ISR assets
- **Cyber:** Provide a Cyberspace Common Operational Picture to ensure freedom of action to support power projection, protect C2, execute networking and engagement activities, defend transactional information



USEUCOM S&T Challenges (4/4)

- **Electronic Spectrum Management:** Provide capability to continue normal military operations in a electromagnetically contested environment
- **Command and Control Interoperability:** Improve capability to leverage partner and allied capabilities to support common goals



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

