



Office of the Undersecretary of Defense for Research & Engineering Directorate of Defense Research & Engineering for Advanced Capabilities
Prototypes & Experiments

Joint International Experimentation

2021 Pacific Operational Science & Technology (POST) Conference

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DDR&E(AC) Mission



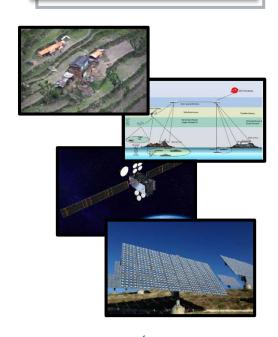
Concepts
Innovation
Requirements
Modernization Areas



Engineering & Analysis
Prototypes & Experiments
Demonstrations
Test Range Infrastructure



Transition to Programs of Record





Joint Staff, Services, OSD, CCMDs





International Partnership – Prototyping INDOPACOM



Strategic Opportunity

- Cooperative, structured US and partner nation R&D will maximize modernization, increase interoperability, and strengthen coalition partnerships
- Jointly identify technologies and experiments that benefit allied partnerships
- Allies devoting R&D resources to modernize their military capabilities in similar priority areas

Solutions:

International Prototyping:

USD (R&E) works with INDOPCACOM J85 and staff to identify opportunities that align to critical needs of Partner Nations and expand
operational venues for experimentation and collaboration

Joint International Experimentation (JIE)

- Field experiments/ technology demonstrations, in cooperation with Partner Nations
- Provide relevant operational environments for testing and assessment of technologies and to enhance coalition defense and security needs and provide mutual benefits from increased cooperation

Foreign Comparative Testing (FCT):

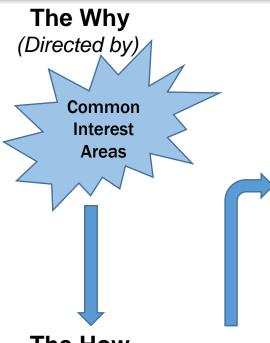
- Find, assess, and field already developed foreign technologies to deliver affordable, near-term solutions to satisfy capability gaps, enhance lethality, and increase readiness
- US Gov -to- Foreign Industry technology evaluation executed under a contract

Strengthening Partnerships with Allies to deliver operational capability



Pathway for International Engagement





Mission Impact

"Heat Map" of impactful concepts that drives
Disruptive and
Revolutionary capability

The What (Formed by)

Interoperable systems
Increased coalition capabilities

Operational

Venues for Joint

Experimentatio

n

The How

(Guided by)

- Venues for Operational Experimentation
- Partner Nations
- Combatant Command and OSD(R&E) advocacy

U.S. Needs & Strengths

CCMD/Services challenges
Building Coalition capacities
Coalitions partnering on
shared problem sets

Int'l Partner Needs & Strengths Expanded

Regional security challenges

Maritime awareness

Counter-terrorism

Power & Energy

Climate Change



Enabling Joint Experimentation







- Enable Security Cooperation Strategy
- Support and promote interoperability with partner nation through science & technology (S&T)



Focus Areas



- Expand experimentation venues to host nations to explore urgent needs and build coalition capacity
- Increase coalition cooperation with CCMD
- Enhance Common Interest Items:
 - Maritime Awareness
 - Counter Piracy
 - Interoperability
 - Communication
 - Data sharing
 - o Global Climate Change
 - Renewable Energy
 - Alternative Medical Distribution







Summary



- International partnerships identify, and execute cooperative experimentation to meet US and Partner Nation needs
- FCT finds, assesses, and supports the fielding of allied and partner nation technology to the US Warfighter
- Promote interoperable capabilities and strengthen coalition relationships between our Innovation and Industrial bases

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