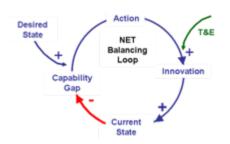
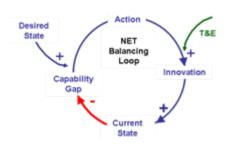


# How Test and Evaluation is Supporting U.S. Customs & Border Protection's New & Emerging Technology Program

#### Closing the Capability Gap with Innovation Technology and Test and Evaluation



Stephen M. DeFrank Jr.
Contractor, ManTech Team
U.S. Customs and Border Protection





#### Agenda Topics

- Who is the CBP?
- What is NET?
- How is T&E Closing the Gap
- Current T&E Success Stories
- Lessons Learned



#### Who is CBP?





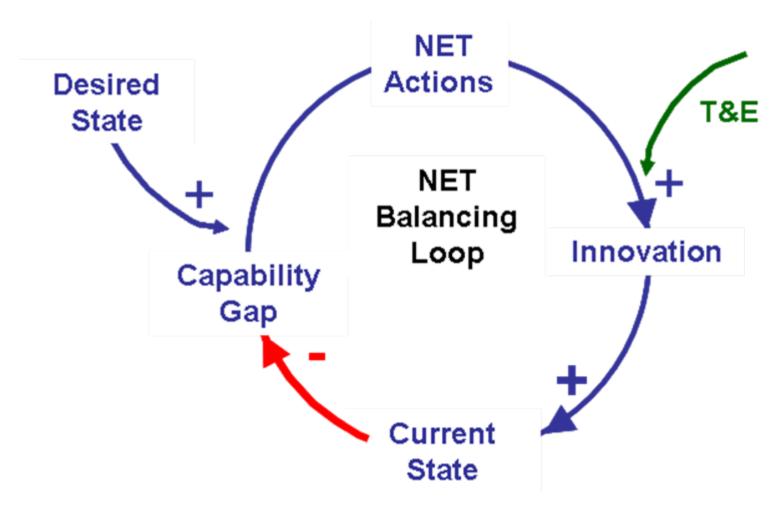
## What is NET?

The New and Emerging Technology (NET) Project is an initiative within the Office of Innovation & Technology (OTIA) to evaluate potential solutions to CBP needs using a simplified Operational Utility Evaluation (OUE) process that provides senior leadership with information upon which to make decisions



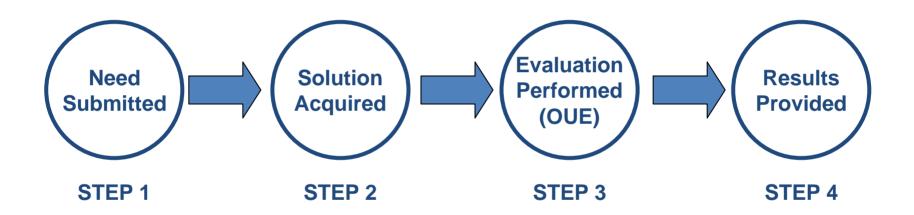


## How is T&E Closing the Gap?



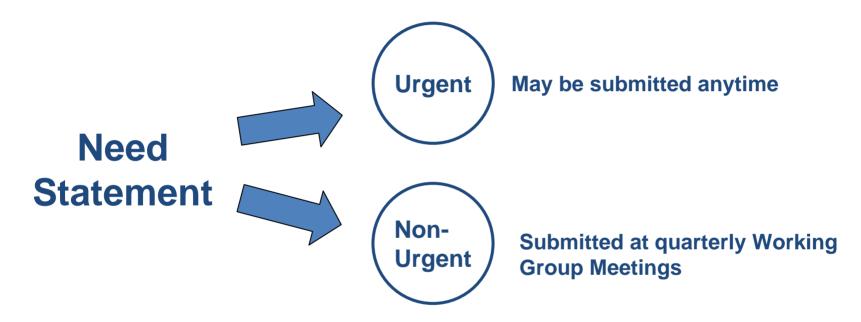


# Simplified NET Process





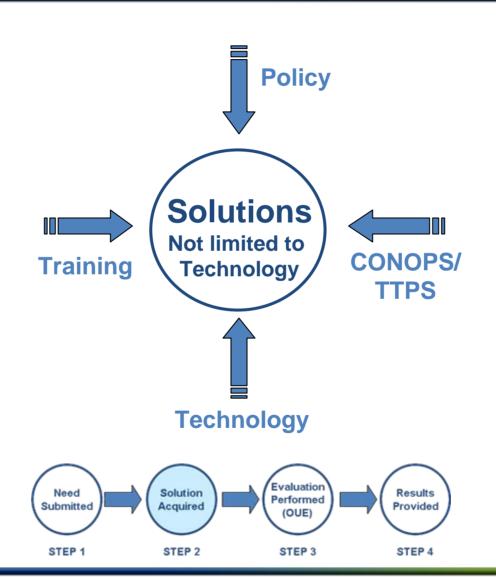
### Step #1 – Need Submitted







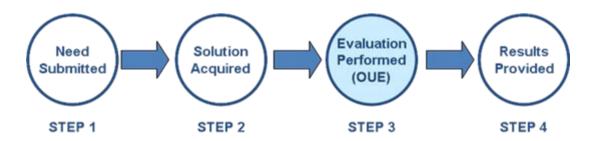
## Step #2 Solutions Acquired





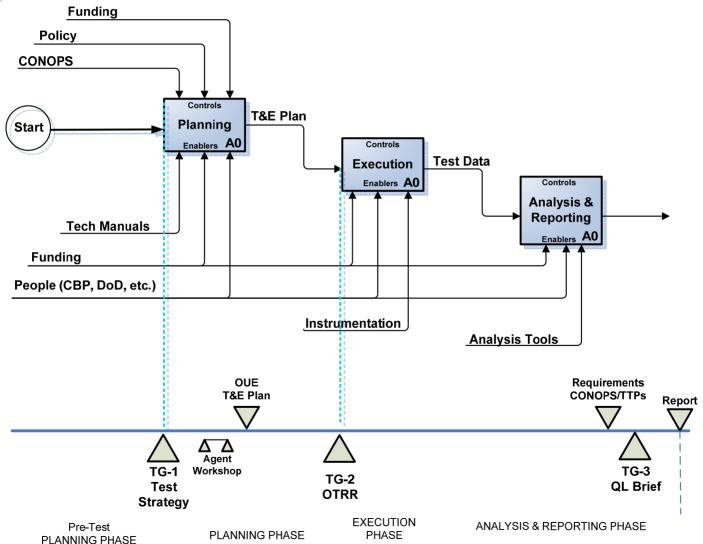
# Step #3 –OUE Performed





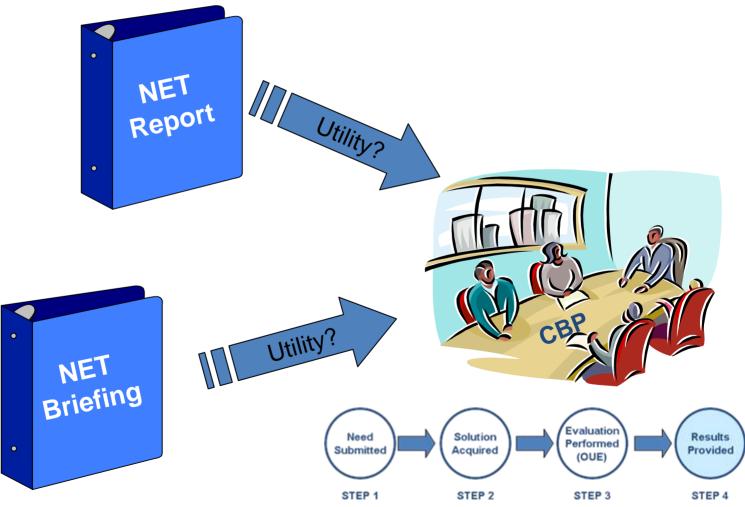


# 6-1-4 (Plan-Execute-Report)



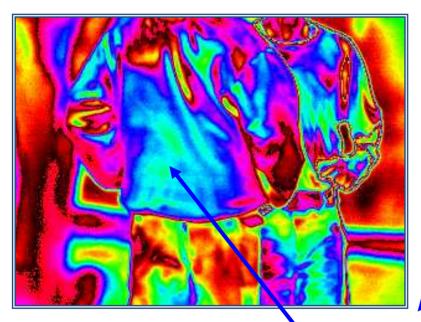


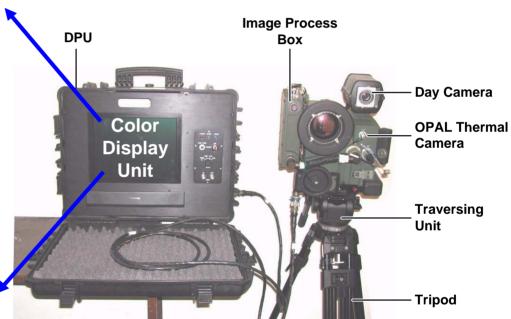
### Step #4 – Results Provided





# **OPAL Color Thermal Camera System**



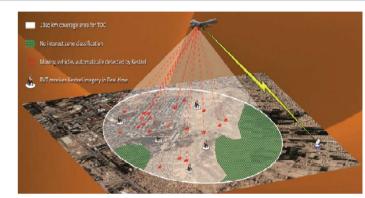


**Concealed Item** 



#### **Kestrel Moving Target Indicator**

- A SW program that provides analysis of EO/IR imagery either real time or recorded
- Automatically detects & tracks moving objects from the video imagery
- Puts a Red Box around detected objects
- •Kestrel Land MTI by Sentient Inc.
  - TRL 9 used by Australian DoD in Middle East
  - 2 x 2 pixel resolution for motion detection
  - Ground speeds as low as 2 km/hr
  - Fast ground target detection up to 100 km/hr
  - Land and Maritime Versions





**Insert Video Here** 



#### **Other NET Projects**

- 1. Moving Target Indicator
- 2. Encrypted Wireless Mesh Network
- 3. GPS Tracker
- 4. Advance Signal Exploitation
- 5. IP Addressable Communications Receivers
- 6. Mobile Direction Finding Equipment
- 7. Hand Held 2 Fingerprint Device
- 8. Under Vehicle Surveillance System (UVSS)
- 12. VIN Bar Code Scanner
- 13. Game Cameras
- **14. OPAL**
- 19. SPIDER
- 20. Thermal Imager



- NET is a simplified process to evaluate potential solutions to CBP needs
- Solutions may be material or non-material
- Operational Utility Evaluations (OUEs) or NET Technology Demonstrations are conducted to determine utility of the proposed solution
- Results of testing are provided to leadership to make informed decisions on acquisition of technologies

Closing the Capability Gap with Innovation, Technology, and T&E