

CBRND T&E Standards and Collaboration



Brief for CBDAIF
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Topics



- **CBRND T&E Standards**
 - Why?
 - What?
 - How?
- **Challenges**
- **Areas of Collaboration**



Why T&E Standards?

- **T&E Standards - Validated test infrastructure, methodologies, documentation that are used to provide reliable, reproducible data to meet T&E community data needs**
- **CBRND T&E standard methodologies essential for quality, affordable defense systems!**
 - High quality data, common understanding that can be shared by all
 - Reduced redundant testing, program cost and schedule slips
- **Cross community buy-in for standardized procedures is key**
 - Provides higher Return on investment and better data
 - Stakeholders will use what they participated in developing

T&E Standards reduce risk, cost!



CBRND T&E Strategy



- **Sustain and operate CBDP MRTFB**
 - West Desert Test Center (WDTC) tailored to CBDP needs
 - Plan to support medical
 - Refocus resources for best value
- **Focus investments on emerging threats and advanced technologies**
 - Ensure operational realism of CBDP testing
 - Consider existing capabilities within and outside of DoD when identifying gaps
 - Add biosurveillance and NTA test capabilities and/or capacity
- **Strategically assess of best value, risks, and trade-offs**
 - Align S&T efforts with development of M&S tools
 - Develop analytical capabilities
- **Expand T&E Standards development**
 - Leverage and integrate efforts across defense, federal, and other agencies
 - Add biosurveillance, diagnostics, and medical areas to meet President's goals
- **Leverage field exercises and training**
 - Obtain field performance data
 - Improve gap identification and T&E process



High Visibility of T&E Standards



Highly visible issue at National and International levels

- **CBDP DoD T&E standards development efforts support federal agency and international partners:**
 - DOD/DHS/EPA Technical Coordination Working Group (TCWG)
 - White House National S&T Council (NSTC) Subcommittee on Standards (SoS) Roadmap Working Group (WG)
 - International WGs
- **Rad/Nuc standards now being addressed, with direct interagency involvement**

Ultimate goal: Reliable data understood by all



Benefits: Better Data, Decisions



- **Higher confidence in test data**
 - Repeatability and reproducibility of test procedures
- **Ability to compare data between validated facilities, trials, phases**
 - DoD, industry, interagency, international
- **Better understanding, application, and wider utility of data**
 - Ensure T&E meets decision needs from S&T to OT
- **Acquisition program success, cost savings**
 - Enables efficient test designs, effective use of data
 - Reduces redundant and repeated tests
 - Acceleration of acquisition programs
- **Higher ROI of T&E investments and events**
- **Increased confidence in quality of CBD equipment to warfighter**

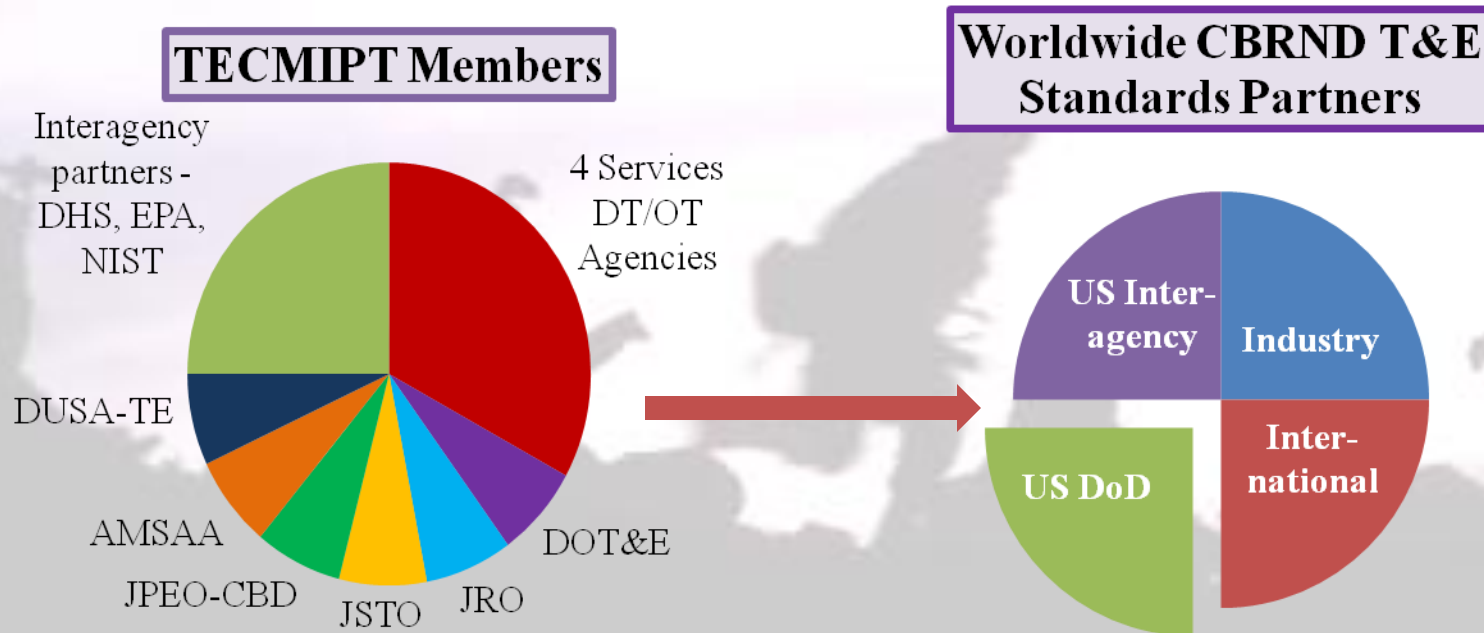
Community Coordination Key for Implementing T&E Standards!



DoD Process for Establishing T&E Standards



- CBRND T&E Executive establishes DoD CBRND T&E standards through T&E Capabilities and Methodologies IPT (TECMIPT)
- SMEs in TECMIPT commodity area sub-groups provide rigor to T&E standards development





How? IPT/Community Process

T&E Capabilities and Methodologies IPT (TECMIPT)



Provides joint, cross-community subject matter expertise and rigor to establish T&E Standards, leveraging existing info

- JPEO-CBD, JSTO, JRO, ATEC (AEC, OTC, DTC, DPG), MCOTEA, OPTEVFOR, AFOTEC, ECBC, DOT&E, NSWC-Dahlgren, AMSAA (serves as TECMIPT Chair for DUSA-TE), NIST, DHS, EPA
- Identifies T&E capability gaps for DUSA-TE's POM submission
- June 2009 – Instructions to the TECMIPT:
Develops/reviews/recommends T&E standards documents for CBRND T&E Executive approval
- July 2010 – CBDP T&E Standards Development Plan signed into policy by CBRND T&E Executive



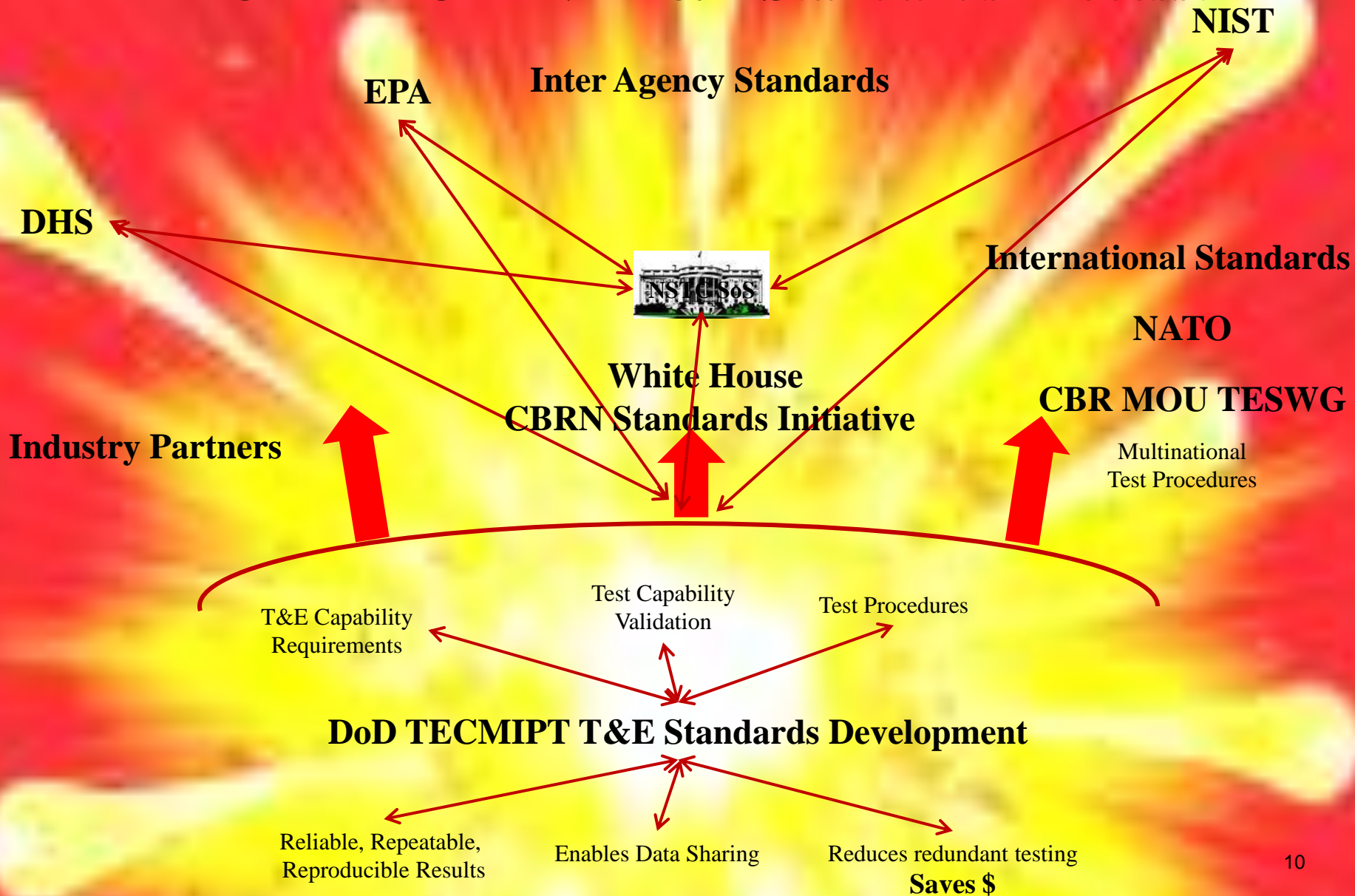
T&E Standards – More Than Methodologies



- **TECMIPT develops T&E Standards Package for each T&E capability**
 - T&E Capability Needs (TECN) Statement – Requirements for data/infrastructure, General T&E Strategy for use of data
 - Validation plan and final report
 - Test Operations Procedures (TOPs)
 - Now fully detailed, include supporting documents to fully define a test
 - DoD TOPs inform Multinational TOPs (MTOPs)
- **T&E Standards Packages approved, published, maintained by CBRND T&E Executive**

T&E Standards Package meets decision-maker data needs!

Explosion of Interest in TECMIPT CBRND T&E Standards Process!





Challenges



- **Community involvement, including Industry**
 - Need maximum subject matter expertise
- **Time and money**
 - Personnel and budget cuts too!
- **Synchronization with Industry test standards**
 - DOD T&E Standards submitted to ASTM/other when applicable
- **Recent DOD 5000 focus on pre Milestone B activities**
 - T&E impacts Example: Simulants and agent-simulant correlation
- **OSD is re-focusing Chemical and Biological Defense**
 - Medical Countermeasures
 - Bio Surveillance



Areas for Collaboration



- **T&E Standards development**
- **Threat portrayal: bringing forward simulants with systems under test**
- **Standardizing bio agents used across testing**
- **M&S**



Summary



- **Need Industry support for successful acquisition programs**
- **T&E Standards a long term effort, partnership**
- **Affordability as key concern increases T&E Standards focus**

Questions?





Back Ups



TECMIPT Mechanism for T&E Standards Development



- **Seven Capability Area Process Action Teams (CAPATs) develop/review/recommend T&E standards documents for CBRND T&E Executive approval**
- **CAPATs:**
 - Chemical Detection
 - Biological Detection
 - Individual Protection
 - Collective Protection
 - Decontamination
 - Radiological/Nuclear (cross-commodity)
 - M&S (cross-commodity)



Medical T&E is Unique



Challenges:

- Different community from CBDP – FDA regulatory science is driver
 - Need to ensure decision support, relation of T&E Standards to use concepts
- MCMC capacity, scope not totally defined
- Complexity of T&E Strategy

Advantages:

- Leverage expertise in presenting bio agent samples, analysis
- Common threat portrayal across systems (diagnostic and countermeasures)
- Link Diagnostics, M&S decision support, countermeasures T&E