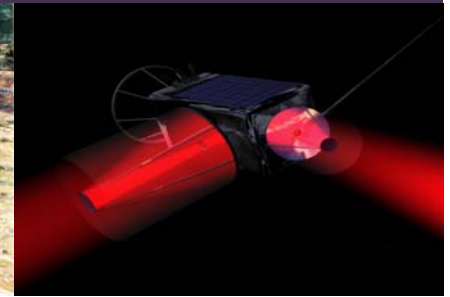
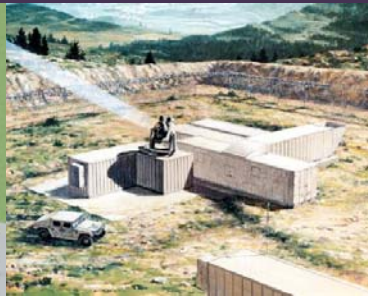
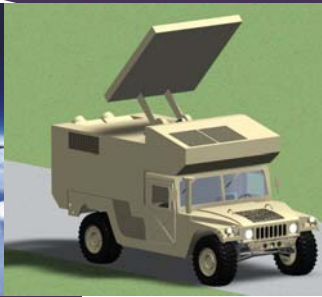




Tri-Service Study 2011



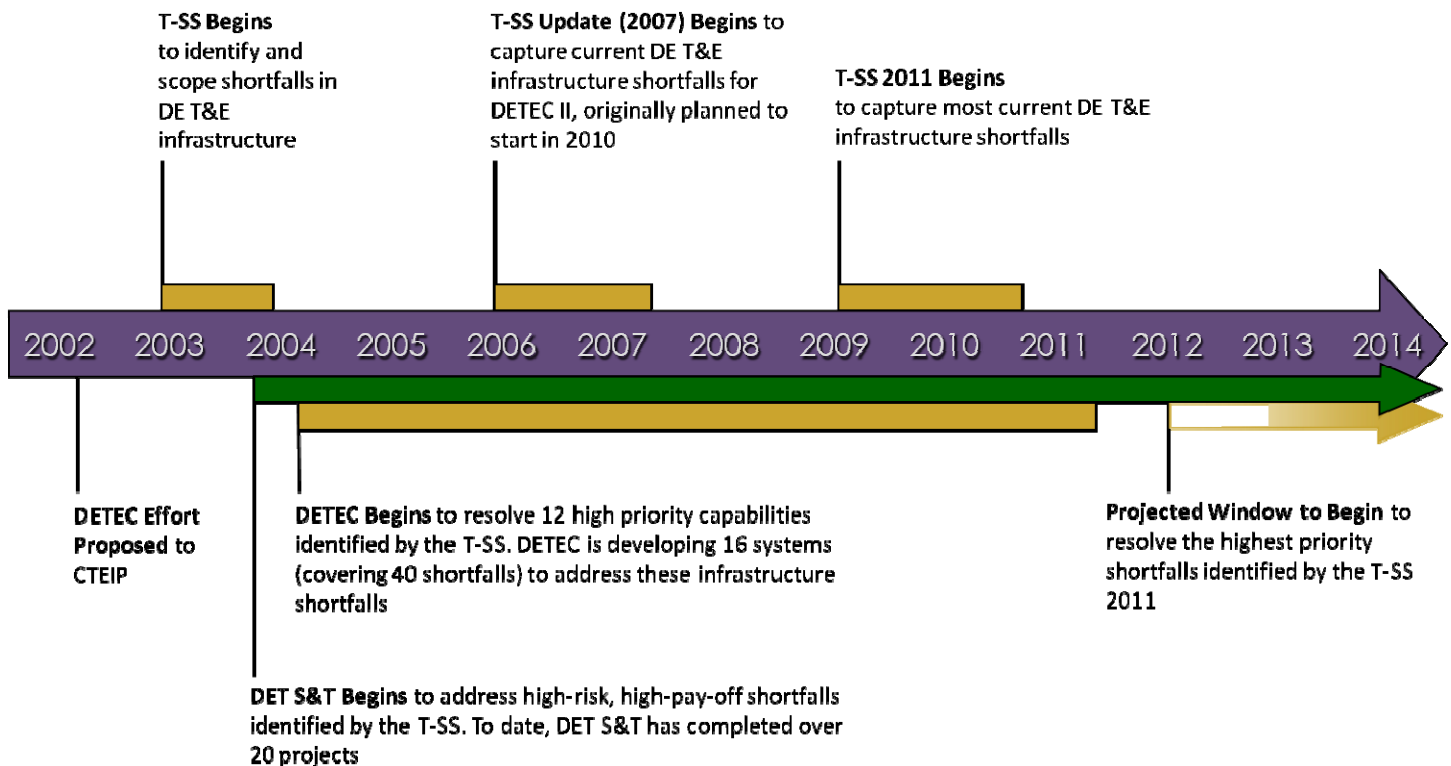
T-SS 2011 Summary

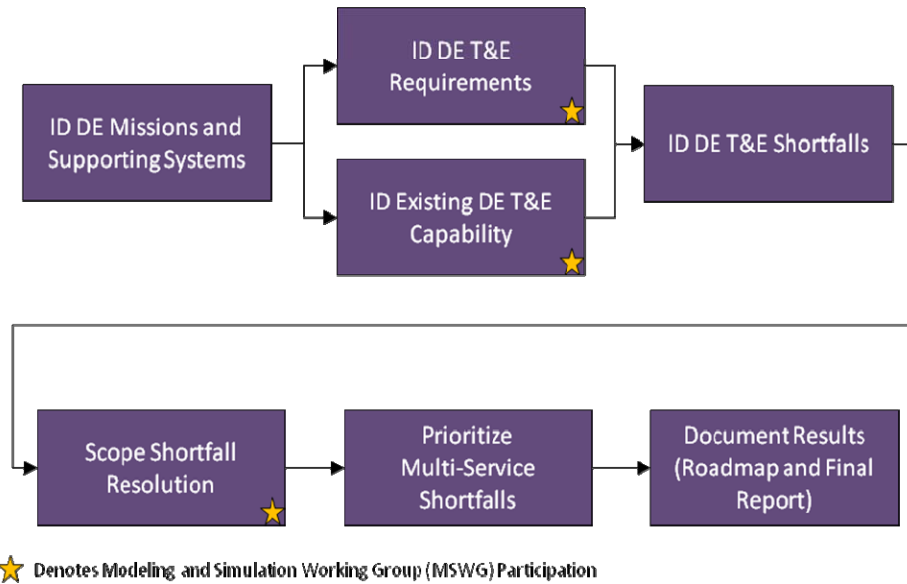
- Goal is to identify, scope, and prioritize T&E infrastructure shortfalls for directed energy weapon systems
- Focuses on HPM and HEL directed energy weapon systems
- Includes Tri-Service participation from the Air Force, Army, and Navy for input while identifying directed energy T&E shortfalls
- T-SS 2011 Results are planned to be available by late 2011
- Previous T-SS Final Reports can be

Continued advancements in high power microwaves (HPM) and high energy lasers (HEL) have created a new class of directed energy (DE) weapon systems. However, current DE test and evaluation (T&E) capabilities are insufficient to support the full spectrum of testing required for DE acquisition.

In 2002, the Directed Energy Test and Evaluation Capability (DETEC) was proposed to the Central Test and Evaluation Investment Program (CTEIP). Prior to funding such an effort, CTEIP wanted a better understanding of the magnitude of DE T&E shortfalls and authorized the Tri-Service Study (T-SS) to scope shortfalls in DE T&E infrastructure.

After successful completion of the T-SS, CTEIP funded the DETEC program to address the highest priority capabilities identified by the T-SS. DETEC is building 16 systems to address the 12 high-priority capabilities, which are planned to be completed in early calendar year 2010. The T-SS 2011 repeats the T-SS process to capture the most current DE shortfalls.





T-SS 2011 Process

There are seven steps of the T-SS 2011.

ID DE Missions and Systems: During this phase of the T-SS, each Service identifies the missions utilizing DE that will have systems entering testing in the next 12 years.

ID DE T&E Requirements: To identify DE T&E requirements, the T-SS team creates sample test scenarios for each of the missions provided by the Services. Each Service reviews and finalizes these scenarios during a week-long Service Workshop. The final product is a set of test scenarios describing the type of DE T&E infrastructure required to successfully test DE systems entering testing in the next 12 years.

ID Existing DE T&E Capabilities: Existing DE T&E capabilities are identified by issuing a Capability Call. The Capability Call is sent to all of the major range and test facility base (MRTFB) locations and other DE test facilities. The call asks each test facility to describe their entire capability to perform DE testing.

ID DE T&E Shortfalls: Shortfalls in the United States’ ability to perform DE testing are identified by comparing the DE T&E requirements from the Service Workshops with the existing DE T&E capabilities identified during the Capability Call. Any requirement that cannot be fully addressed by an existing capability is a shortfall.

Scope Shortfall Resolution: To provide TRMC and CTEIP an understanding of the resources required to address the shortfalls identified in the previous step, the T-SS team issues a Solution Call. The Solution Call asks Government, industry, and academia to briefly describe nominal solutions to the identified shortfalls, including cost, schedule, and risk in a white paper format.

Prioritize Shortfalls: With an idea of the cost, schedule, and risk to fill each shortfall, the Government prioritizes the DE T&E shortfalls. A body known as the Senior Review Group is responsible for this prioritization. The SRG is made of a senior (usually senior executive service (SES) level) representative from the Air Force, Army, Navy, and Electronic Combat Reliance Panel.

Document Results: Finally, the T-SS team documents the prioritized shortfalls for funding consideration by TRMC and CTEIP. Currently, high-risk shortfalls are planned to be addressed through TRMC’s Science and Technology program. Lower-risk shortfalls are planned to be addressed by CTEIP during DETEC II.

T-SS 2011 Status

The T-SS 2011 kicked off in July 2009 and is planned to be completed in July 2011.

About DETEC

DETEC is addressing joint service DE weapon system T&E infrastructure needs and implementing solutions to these identified needs. DETEC develops and fields capabilities to address high-priority shortfalls identified in the 2004 CTEIP-funded T-SS.

As part of the DETEC Team, Science Applications International Corporation (SAIC) implements the DETEC project by working with Government and industry teammates to develop functional specifications for certain DE T&E infrastructure capabilities. The DETEC Team acquires these capabilities in competitive procurements and integrates the capabilities into the MRTFB to help meet the testing requirements for current and future HEL and HPM weapon systems. ■

Visit the DETEC website (www.detecteam.org) to request a copy of the T-SS 2011

