

Integrated Strategic Planning and Analysis Network (ISPAN)

Executive Summary

- U.S. Strategic Command (USSTRATCOM) and the Air Force Operational Test and Evaluation Center (AFOTEC) tested and then USSTRATCOM fielded the Integrated Strategic Planning and Analysis Network (ISPAN) Mission Planning and Analysis System (MPAS) Block 1, Spirals 4 and 5. Testing and performance was adequate.
- USSTRATCOM and AFOTEC conducted an Operational Assessment (OA) of ISPAN Collaborative Information Environment (CIE) Spiral 3 during the USSTRATCOM exercise "Global Storm" in March 2007. Because of several operational deficiencies, DOT&E determined the CIE spiral was neither operationally effective nor operationally suitable.

System

- ISPAN is an operational planning and analysis network modernization program for USSTRATCOM being developed in three blocks. ISPAN consists of a family of customized software applications that run on commercial-off-the-shelf hardware and use a USSTRATCOM Enterprise Database. The system is currently developing and fielding Block 1.
- The MPAS, previously known as the Fielded Operational System, consists of the former Strategic Warfare Planning System. MPAS provides dedicated planning and analysis for all U.S. strategic nuclear forces. MPAS also provides planning and analysis to create plans for specified theater and strategic conventional forces. Maintenance and capability enhancements are tested and delivered every six months.
- Time sensitive planning is accomplished using the new CIE (previously called ISPAN Architecture and Integration) being developed in six spirals for Block 1. This capability will allow users from multiple Combatant Commander (COCOM) staffs, subordinate commands, as well as other agencies, to collaborate online while providing planning and analyses to senior decision makers.



- ISPAN modernization expands planning and analysis to new mission areas integrating the full spectrum of kinetic and non-kinetic weapons into strategic and theater plans.

Mission

- USSTRATCOM uses ISPAN to perform deliberate and adaptive, strategic, nuclear, and non-nuclear planning and analysis. This includes developing the national deterrence war plans offering both nuclear and non-nuclear weapon options using the MPAS.
- The COCOMs, subordinate staffs, and other national agencies use the CIE for collaborative mission planning and analysis, course of action development, and commander's decision briefing preparation in support of time sensitive planning scenarios and time critical decisions regarding force employment.

Activity

- USSTRATCOM and AFOTEC conducted ISPAN (MPAS) Block 1 Spiral 4 maintenance and modernization testing in December 2006. Testing included the evaluation of the enhancements to MPAS Missile Graphics Planning System (MGPS) and the Air Vehicle Planning System component applications, and the verification of the maintenance upgrades to the Data Management System, Data Processing System, and Theater Integrated Planning Sub-systems. USSTRATCOM fielded MPAS Spiral 4 in January 2007.
- USSTRATCOM and AFOTEC conducted ISPAN (MPAS) Block 1 Spiral 5 maintenance and modernization testing in May to June 2007. Testing included the evaluation of the enhancements to the MGPS and the Dynamic Application and Rapid Targeting System and the verification of the conversion of the legacy USSTRATCOM Enterprise Database to an Oracle Database. USSTRATCOM fielded MPAS Spiral 5 in July 2007.

AIR FORCE PROGRAMS

- USSTRATCOM and AFOTEC conducted an OA of ISPAN CIE Block 1 Spiral 3 in conjunction with the USSTRATCOM exercise “Global Storm” in March 2007. AFOTEC issued an OA report in July 2007. AFOTEC evaluated the initial collaborative capability of CIE including:
 - Collaboration via the Secret Internet Protocol Router Network (SIPRNET) between USSTRATCOM planners and a remote component commander’s staff
 - Development of the commander’s course of action and decision briefs to national leadership
- The Air Force Program Executive Officer for Command, Control, and Combat Support notified OSD of an anticipated ISPAN program schedule breach on July 31, 2007. USSTRATCOM and the ISPAN program office are developing a recovery plan that includes development of the Block 1 Capability Production Document (CPD), definition of the new Block 1 end-state, and creation of a new Test and Evaluation Master Plan (TEMP).

Assessment

- USSTRATCOM and the ISPAN program office executed a development and test schedule that delivers MPAS maintenance and modernization builds on a six-month schedule per the DOT&E-approved TEMP. A combined test team comprised of USSTRATCOM functional experts and AFOTEC testers found no significant operational issues with Spiral 4 and Spiral 5 releases. Testing and performance for ISPAN (MPAS) Spiral 4 and Spiral 5 was adequate to support the fielding decisions.
- USSTRATCOM and the ISPAN program office originally planned to deliver ISPAN CIE Spiral 3 in conjunction with ISPAN (MPAS). Emerging requirements led USSTRATCOM users to direct the program office to focus on planning in a net-centric and collaborative environment. This led to a delay of the CIE Spiral 3 OA until March 2007.
- The CIE Spiral 3 OA identified several operational issues, and DOT&E determined the spiral was neither operationally effective nor operationally suitable. CIE Spiral 3 did not

demonstrate the software maturity or capability to satisfy mission objectives. Deficiencies included:

- With only 10 percent of the desired users logged onto the system, latency was often 30 to 60 seconds (less than 5 seconds desired). In addition, some critical planning data were lost when routinely manipulated.
- The software was unstable and contained flaws. CIE software configuration management was inadequate. More robust developmental testing could have discovered the majority of these problems prior to the OA.
- Training and documentation, including the users’ concept of operations (CONOPS), were incomplete or inadequate and failed to provide the necessary guidance for users to effectively collaborate.

Recommendations

- Status of Previous Recommendations. USSTRATCOM and the program office are addressing previous recommendations. USSTRATCOM must complete the CPD and TEMP revision for ISPAN Block 1. USSTRATCOM is developing requirements documents for ISPAN Block 2.
- FY07 Recommendations.
 1. USSTRATCOM and the ISPAN Program Manager should codify the desired end-state of Block 1 (capabilities to be delivered) for both the CIE and MPAS in an approved CPD. The ISPAN Block 1 TEMP revision should be approved to govern testing of the remainder of Block 1.
 2. USSTRATCOM should not field additional capabilities beyond those delivered in Spiral 3 until the developer can demonstrate, in a non-operational environment, that the existing baseline is stable and all mission-critical deficiencies have been fixed.
 3. USSTRATCOM should develop CONOPS and other applicable policies guiding the operation of the CIE so that users have a clear understanding of roles and responsibilities during collaborative planning.