The Department of Homeland Security (DHS) Office of the Chief Information Officer (OCIO) conducted a program health review of the Customs and Border Protection (CBP), Tactical Communications Modernization (TACCOM) program. This assessment represents the program’s status through March 2012.

Description and Background:
This assessment is primarily focused on the TACCOM-1 iteration that will evolve into the TACCOM-2 program that was granted ADE-1 approval in March 2011. A separate DHS-level Exhibit 300 for TACCOM-2 will be created in the FY14 cycle.

The focus of TACCOM-1 is the modernization of the existing, primarily analog, Land Mobile Radio (LMR) (Houlton) tactical network that has been in existence for many years. Originally, the goal of TACCOM-1 was to both modernize the system and expand coverage. It was determined that coverage expansion with the existing, although modernized, network is cost prohibitive. As a result, the scope of TACCOM-1 was reduced to the completion of expansion projects already underway, capped by a digital-in-place (DIP) upgrade or replacement of any remaining analog equipment. The upgrades will migrate the system from analog to digital, provide encryption, migrate to narrowband spectrum usage, ensure that only legal spectrum is used, support Project 25 for interoperability with local authorities, and repair any infrastructure in need of repair. The TACCOM-1 upgrades provide the technology baseline for TACCOM-2. Once the DIP upgrade is in place, the network will be in an O&M mode until TACCOM-2 systems replace it.

TACCOM-2 plans to employ a new 700MHZ broadband public safety frequency allocation. This new band would help to achieve much better and cheaper voice, data, and video communications among DHS Components, state and local public safety organizations, and other emergency responders. TACCOM-2 looks to capitalize on existing and evolving commercial technologies such as Long Term Evolution (LTE), where appropriate, to augment the tactical system in hybrid network architecture.

Risks and Issues:
The highest risk to TACCOM-1 is keeping the projects on schedule. Although actively managing the projects to the schedule, several issues have caused delays. To meet funding availability constraints, TACCOM-1 created a very aggressive upgrade schedule which calls for the completion of all upgrades by the end of FY14.

- If simultaneous coverage of legacy and upgrade systems is required, multiple code plug changes will be required during deployment.
- If WEB does not determine a DIP Internet Protocol solution path forward, the DIP project will incur significant schedule delay.
If the National Law Enforcement Communications Center does not increase its RNC capacity, it will not be able to support the combined connectivity requirements for the modernization projects (DIP, Rio Grande Valley, and Houlton).

TACCOM-2 faces several major risks:

- The status and rights of Federal user access to the 700 MHz spectrum is still undetermined. This can potentially delay TACCOM-2 reaching of program goals.
- If the life cycle cost estimate (LCCE) and business models for the National Public Safety Broadband Network and shared infrastructure are not defined, meeting program goals may be delayed.
- Technology is evolving very quickly. Selecting the right technology path is critical to program success over its life cycle. Selecting the wrong approach can lead to technological obsolescence and the inability to meet mission needs.

**Mitigation Strategy:**
The TACCOM-1 PMO continues to closely manage the upgrade projects and associated contractors with meeting schedule as the primary driver. The required environmental studies and lease negotiations have proven to be long lead items that have caused a six month schedule slip. Projected costs, however, have not changed. This slip would normally be considered a breach; however, because there is no program baseline, it is technically not a breach. TACCOM-1 also faces risks related to instability in the technology and difficulties in getting modifications done to the existing contracts, which were awarded in 2009.

The Joint Wireless PMO TACCOM-2 program plans to mitigate the identified risks by continuing to use the existing spectrum for voice and leverage alternate commercial services for data and video as secondary sources, as needed. It will also continue to track developments and business models from public safety agencies and update the LCCE and business models accordingly. It will closely monitor technological developments and commercial offerings for applicability to the program requirements.

**Assessment:**
TACCOM-1 upgrade projects are well managed and progressing; however, there have been, and may continue to be, schedule slips due to required environmental studies, lease negotiations, contract modifications to existing contracts, and technology instabilities.

TACCOM-2 is in the Analyze/Select acquisition phase working towards ADE 2A and the JWPMO and ESC are up and running. Program complexity is high and success relies greatly on coordination and agreement amongst a large number of TACCOM-2 stakeholders, as well as the commercial availability of appropriate technology to meet requirements. Although the program is proceeding as planned, the CIO will continue to monitor this program to ensure that it continues along a path to quality program management and meets mission needs. The CIO assesses the both the TACCOM-1 and TACCOM-2 programs as Medium-Risk.
Score: 3