

Strategic Planning Division

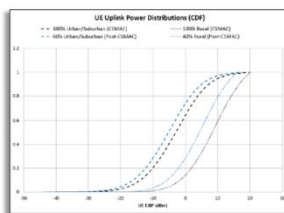
Advanced Wireless Services (AWS-3) Relocation Support

DSO Provides Leadership for Advanced Wireless Services (AWS-3) Spectrum Relocation

The Defense Spectrum Organization (DSO) has been instrumental in identifying additional spectrum as part of the 10-Year plan (2010 National Broadband Plan). The 10-Year plan called for a total of 500 MHz of federal and nonfederal spectrum to be made available over the next 10 years, initiated in 2010, and for analyzing reallocation impacts on DoD systems and capabilities. The DSO has the overarching analytical capabilities required to implement the DoD Transition Plan for (AWS-3).

Cumulative Distribution Function of Total EIRP per Scheduled UE

- CSMAC Baseline
 - Spectrum in the 1755-1780 MHz band would be used solely for mobile uplink
 - Long Term Evolution (LTE) Frequency Division Duplex (FDD) system
 - 10 MHz LTE Bandwidth
 - 100% system loading at LTE Base Station (eNodeB)
 - All Physical Resource Blocks (PRB) are occupied at all times
 - 100% outdoor user equipment (UE) distribution
 - $P_0 = -90$ dBm and $\alpha = 0.8$ for uplink (UL) Power Control (urban/suburban/rural)
 - Proportional fair algorithm for LTE Scheduler
 - Full-buffer traffic model (i.e., All UEs have data in their Radio Link Control (RLC) layer buffer at all times)
- Post-CSMAC Refinement
 - 5 or 10 MHz LTE channel
 - Network loading of 60% for Urban/Suburban and 40% for Rural
 - Results in a shift of EIRP Cumulative Distribution Function (CDF) curves



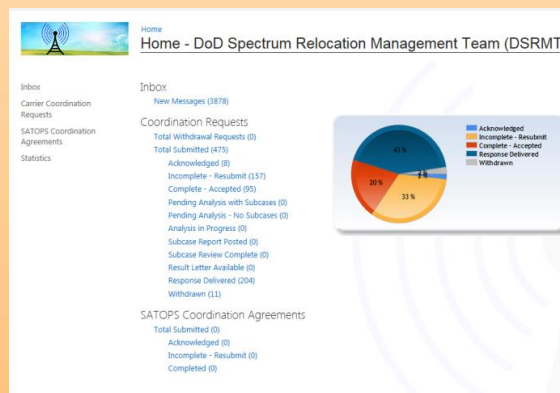
The plan calls for the relocation of DoD operations from the 1755-1780 MHz band; and establishing permanent sharing agreements

for those systems remaining in the band and transitional sharing with AWS-3 licensees prior to systems relocating out of the band.

Defense Spectrum Relocation Management Team (DSRMT)

DSO established the Defense Spectrum Relocation Management Team (DSRMT) to coordinate activities among the Military Services; to coordinate interaction between the wireless industry and the Military Services; and to conduct engineering (analysis, modeling, test, and demonstration) activities to facilitate increasingly less restrictive sharing arrangements for both early entry and permanent spectrum sharing.

Early Entry Portal (EEP)

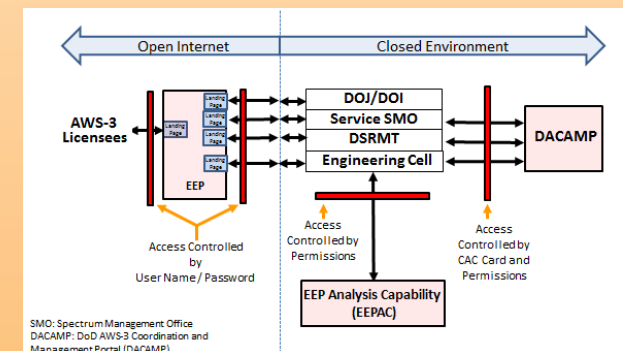


In addition, the team developed the spectrum management/coordination capabilities needed to facilitate the relocation of DoD operations from the 1755-1780 MHz band into the agreed upon destination bands (1780-1850 MHz, 2025-2110 MHz).

1755-1780 MHz Spectrum Coordination Capabilities

The Early Entry Portal (EEP), the EEP Analysis Capability (EEPAC), and the DoD AWS-3 Coordination and Management Portal (DACAMP) all comprise the DoD AWS-3 1755-1780 MHz Coordination Portal, which provides the capabilities for the DSO and Service Spectrum Management Offices (SMO) to coordinate spectrum relocation activities with the commercial entities for early access to the AWS-3 band.

DoD Infrastructure Supporting Coordination



Providing Spectrum Sharing Leadership for Improved Domestic Spectrum Access

Strategic Planning Division Point of Contact:

Director:
DSN 375-3799
CML 301-225-3799

Website: <http://www.disa.mil/Mission-Support/Spectrum/Strategic-Spectrum-Planning>

Defense Spectrum Organization

Vision: Enabling information Dominance through effective spectrum operations

Mission: Provide direct combatant command/joint task force (JTF) support, strategic electromagnetic spectrum planning, engineering analysis and enterprise capabilities and services to enable effective global electromagnetic spectrum operations for joint warfighters, national level leaders and coalition partners

Customer Partnerships: DSO provides support to the DoD CIO, the Chairman of the Joint Chiefs of Staff, Combatant Commanders, Secretaries of Military Departments, and Directors of Defense Agencies

DSO partners with industry to find innovative solutions to sharing spectrum and use it more efficiently

Defense Information Systems Agency
Attn: Defense Spectrum Organization
P.O. Box 549 Fort Meade, MD 20755
<http://www.disa.mil/mission-support/spectrum>



Joint Spectrum Center (JSC)

A Field Command within the DSO, JSC develops, maintains, distributes and provides expertise for an operational spectrum management system (GEMSIS), spectrum engineering data, applications and tools in support of combat operations and overall coordination of DoD spectrum use. JSC provides E3 management, training, acquisition support and operational support.

Annapolis, MD 410-919-2694

Strategic Planning Division (SPD)

SPD is responsible for developing comprehensive and integrated spectrum planning data along with long-term strategies for DoD spectrum access. SPD provides spectrum management policy, strategic planning, engineering and analyses, and oversight support to ensure continued access to spectrum resources for all DoD missions.

Ft Meade, MD 301-225-3799

Business Management Division (BMD)

BMD provides business operations services to include acquisition planning and oversight; financial management and accounting; personnel management; security; property management; and facilities management.

Annapolis, MD 410-919-2683



DEFENSE SPECTRUM ORGANIZATION

Enabling spectrum access when and where needed to achieve mission success



Advanced Wireless Services (AWS-3) Relocation Support

HF

30 MHz

VHF

300 MHz

UHF

3,000 MHz

SHF

30 GHz

EHF