



DSO Implementation, Integration & Improvement of Net-centric Spectrum Management Services

The DSO develops, maintains and makes available an operational joint spectrum management system and supporting spectrum engineering data for combat operations. DSO develops, maintains and distributes operational spectrum management systems (such as Spectrum XXIO and the Global Electromagnetic Spectrum Information System (GEMSIS)) and supporting spectrum engineering data for combat operations (Joint Spectrum Data Repository (JSDR)), with access through the JSC Data Access Web-server (JDAWS).

GEMSIS

Global Electromagnetic Spectrum Information System (GEMSIS) is the joint program of record that will transform spectrum operations from a pre-planned and static frequency assignment into a dynamic, responsive, and agile capability. The GEMSIS Program Management Office (PMO) will deliver capabilities through an evolutionary incremental acquisition approach. GEMSIS increments will provide spectrum management capabilities to further enhance the ease of use, efficiency, and effectiveness of spectrum management. The GEMSIS PMO will federate future capabilities and services through a net-centric services concept. This action enables the transformation of the current stove-piped spectrum management capabilities to an autonomous and adaptive environment that accelerates the Warfighter's ability to effectively and efficiently manage the electromagnetic battlespace.

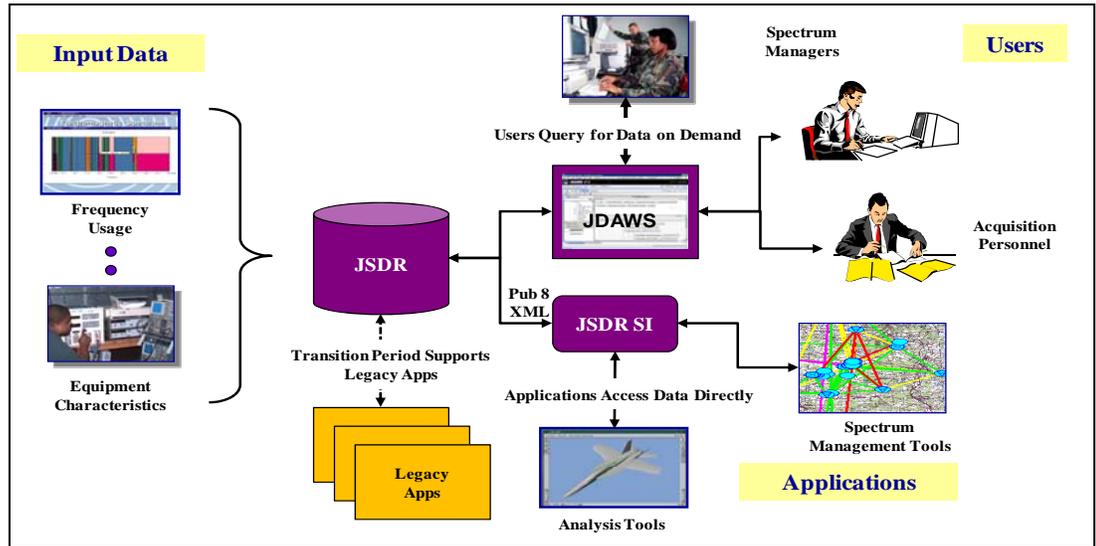


Host Nation Spectrum World Wide Database Online (HNSWDO)

HNSWDO – A Web application providing worldwide visibility of host nation RF spectrum dependent equipment's supportability. It automates distribution of host nation coordination requests and combatant Command submission of host nation supportability comments. Recently upgraded, HNSWDO In-Box user interface and capability was redesigned improving the coordination process while reducing coordination processing time. Future development efforts are underway to enhance the coordination process by adding the capability for combatant commands to comment on draft spectrum dependent system records providing guidance for spectrum systems entering a combatant command area of responsibility for which spectrum supportability has not been obtained.

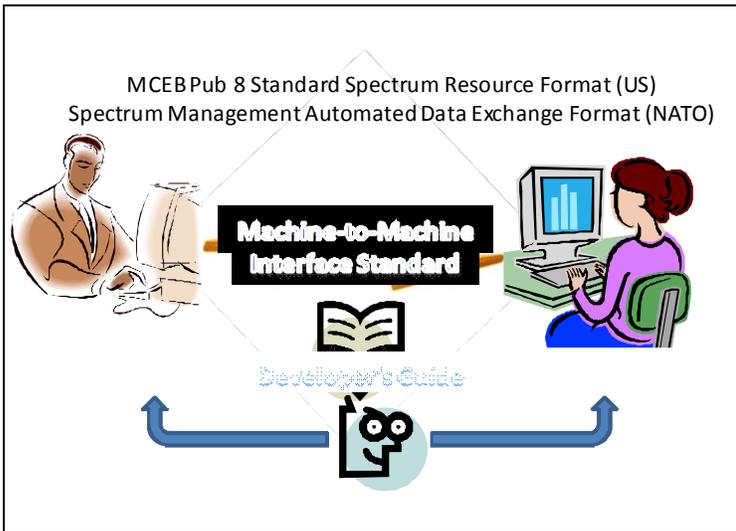
Data: JSDR

One of the capabilities to be included in GEMSIS Increment 2 is the Joint Spectrum Data Repository (JSDR), a Net-Centric capability that will provide the DoD spectrum management community streamlined access to spectrum management information.



The existing JSDR will support DoD-wide spectrum management related tasks with ready access to frequency assignments, spectrum certifications, interference reports, and detailed engineering characteristics and employment information. Enhancements in the coming years will provide additional data sources, Stepstone, data quality assessments, universal query of organic and federated data sources. JSDR will be accessible on both the NIPRNET and SIPRNET through attribute-based access controls to ensure availability.

Data: MCEB Pub 8



MCEB Pub 8 Standard Spectrum Resource Format (SSRF) is the US counterpart to NATO's Spectrum Management Automated Data Exchange Format (SMADEF). SSRF is the mechanism by which US and NATO spectrum management systems will exchange data in the future. While SSRF has been under development for many years, actual implementations, such as SXXIO and JSDR, have identified the need to streamline and update the standard. A joint effort of US and NATO developers is currently revising the standard to ensure future operational requirements are met along with providing support for legacy data standards and repositories.

DSO Net-centric Spectrum Capabilities Points of Contact:

DoD Spectrum Data Administrator
DSN 281-2421
410-293-2421

Spectrum Enterprise Services Director
DSN 281-4958
410-293-4958