1. The Advanced Wireless Service (AWS) licensee submits a request for site/spectrum access to the Defense Spectrum Relocation Management Activity (DSRMA) via the AWS portal at: https://www.pcnportal.net/dod.html. Prior to submitting data, the licensee sets up a portal account and is provided a User's Guide and training. The licensee, or appointed representative, submits the technical characteristics for the AWS base stations and associated mobile units in accordance with instructions provided in the portal User's Guide.

2. The DSRMA portal support staff review the data submitted by the AWS licensee to ensure that the submitter is a valid user, and that the data is of the proper format and content. The submitter is notified via the portal of acceptance of the data and a formal case is created in the portal. Data review for acceptance occurs within 1-2 business days. Once accepted the overall expected timeline for electromagnetic compatibility (EMC) analysis, coordination with the Military Services, and posting of AWS site/spectrum activation requirements to AWS licensees is 60 calendar days. The processing timelines in the paragraphs below are goals set by the DSRMA and Military Services.

3. The DSRMA support staff import the data into the portal embedded IQClear analysis tool for analysis. Also embedded in the portal are the project 1710-1755 MHz frequency assignments and frequency-dependent rejection curves that have been updated to fill any missing technical parameters needed for EMC analysis.

4. An EMC analysis is performed to determine the potential for interference from the mobile units of the proposed AWS network. Analyses are performed in accordance with the industry and National Telecommunications and Information Administration (NTIA) agreed upon outlined in Telecommunications Systems Bulletin 10F (TSB-10F),[1] and the Joint Spectrum Center's EMC Analysis Handbook.[2] The aggregate interference power is calculated at each DoD potential victim receiver within a specified coordination radius from all mobile transmitters at all AWS base stations, assuming that the number of mobile units specified by the licensee per base station antenna sector are active on all licensed channels of the AWS frequency block. Subcases are established for each of the DoD Military Services and analysis results are provided to each Service individually to expedite the coordination process. Analysis results are in the form of denied AWS sites and spectrum to avoid exceeding an interference-to-noise criterion of -10 dB in victim receivers. Site and spectrum activation requirements are identified only for those DoD frequency assignments having an estimated timeline for relocation greater than zero. Subcase analysis results are presented to the DSRMA within 4 business days. 5. Subcase EMC analyses are prepared in detail and forwarded to the Chief, DSRMA for review and transfer to the respective Service Spectrum Management Office (SMO) for review and concurrence. The analysis results show the details of calculations for each

affected Service frequency assignment. Subcase analysis results are presented to the Service SMOs within 2-3 business days.

6. The cognizant SMO reviews the subcase and coordinates the AWS request and analysis results with the affected Military Field Commander. Any concerns are conveyed back through the portal and worked through the DSRMA until the analysis results and site/spectrum activation requirements are agreed upon. This is done with each Service individually. Service SMO concurrence occurs within 15 business days.

7. Upon receipt of concurrence from the SMOs, the results from all the related subcases are compiled into a composite output listing the AWS site and spectrum activation requirements to avoid interference with DoD receivers. The composite output letter is forwarded to the Chief, DSRMA for review and approval to post to the requesting AWS licensee. Composite analysis results are compiled and presented to the DSRMA within 2-3 business days after receipt of concurrence from all SMOs. DSRMA review and approval to post the notification to licensees occurs within 2 business days. 8. Upon DSRMA concurrence, the output letter is posted in the portal and the AWS and SMOs are notified that activity has occurred (notification is automatic). The composite output letter does not present the details of the analyses, affected frequency DoD frequency assignments, or timelines due to the sensitive nature of the data. The characteristics of DoD systems are exempt from public release under the provisions of the Freedom of Information Act. Furthermore, the characterization of the interference interactions of systems that conflict with an AWS desired deployment plan may disclose information, either directly or by inference, that has been classified under Executive Orders and Department of Defense regulations. Disclosure of such information is against the law. Hence, notification letters sent out by the DSRMA identify only site and spectrum/channel activation requirements to EMC with DoD systems. Site activation requirements are presented to the AWS Licensee via the AWS portal within 1 business day of notification approval by the DSRMA.

9. The AWS site/spectrum activation requirements notification is also sent via separate email to NTIA for information.

10. The Service SMOs notify the DSRMA as frequency assignments are deactivated. A database of subcases and affected frequency assignments is maintained by the DSRMA support staff. As frequency assignments are deleted, affected subcases are identified, analyses are rerun, and revised site/spectrum activation requirements notifications are coordinated with DSRMA and sent out through the portal to AWS licensees and the Service SMOs automatically.

Upon receipt of site/spectrum activation requirements the AWS licensee either accepts or objects to the notification. If an objection is filed, the licensee may coordinate with the DSRMA to revise the AWS network design. The DSRMA will entertain technical proposals from the AWS licensee to relieve site/spectrum activation requirements where feasible. The revised AWS network design is resubmitted through the portal for reanalysis and coordination with the Service SMOs, and the process follows accordingly.
Military Field Commanders and the DSRMA monitor the spectrum for AWS compliance with site activation requirements. AWS activity outside the site activation requirements is coordinated between DSRMA and NTIA for issuance of a cease and desist

order.

[1]. Telecommunications Industry Association, Telecommunications Systems Bulletin 10-F, *Interference Criteria for Microwave Systems* (TSB-10F).

[2]. M. Coleman-Ragland, L. McIntyre, R. D'Altorio, B. Hall, and G. Warren, *EMC Analysis Handbook*, JSC-CR-97-010, Annapolis, MD: DoD JSC, March 1997..

## DSRMA AWS Band Sharing Request Process Flow

Numbers correspond to paragraphs describing the process flow.



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