

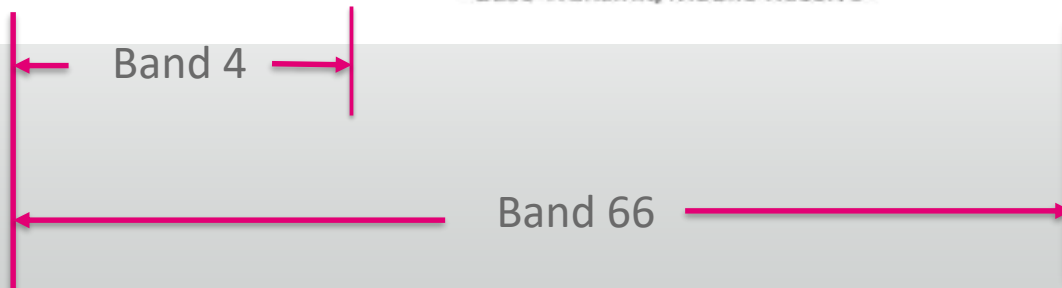
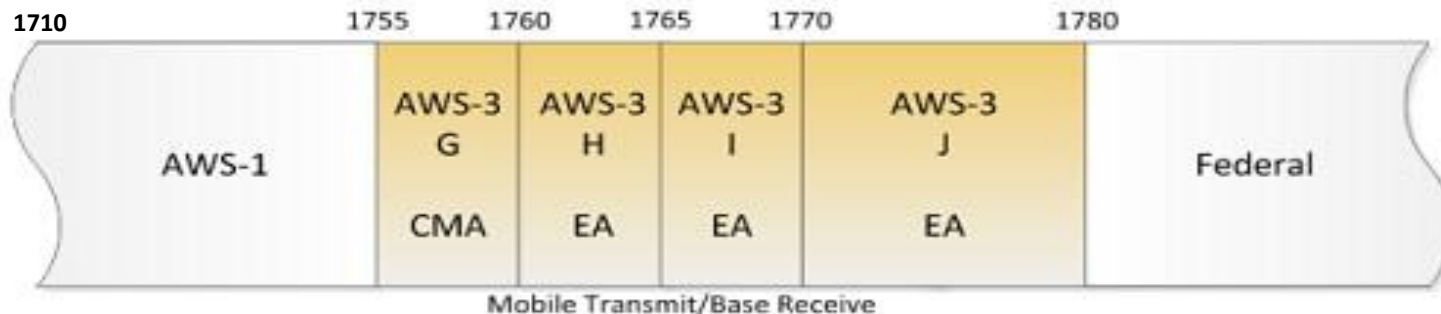


AWS-3 Panel

John Hunter – Sr. Director of Eng. & Tech Policy

AWS-3 Band Plan

1755-1780 and 2155-2180 MHz



Spectrum Sharing / Clearing Considerations for AWS-3

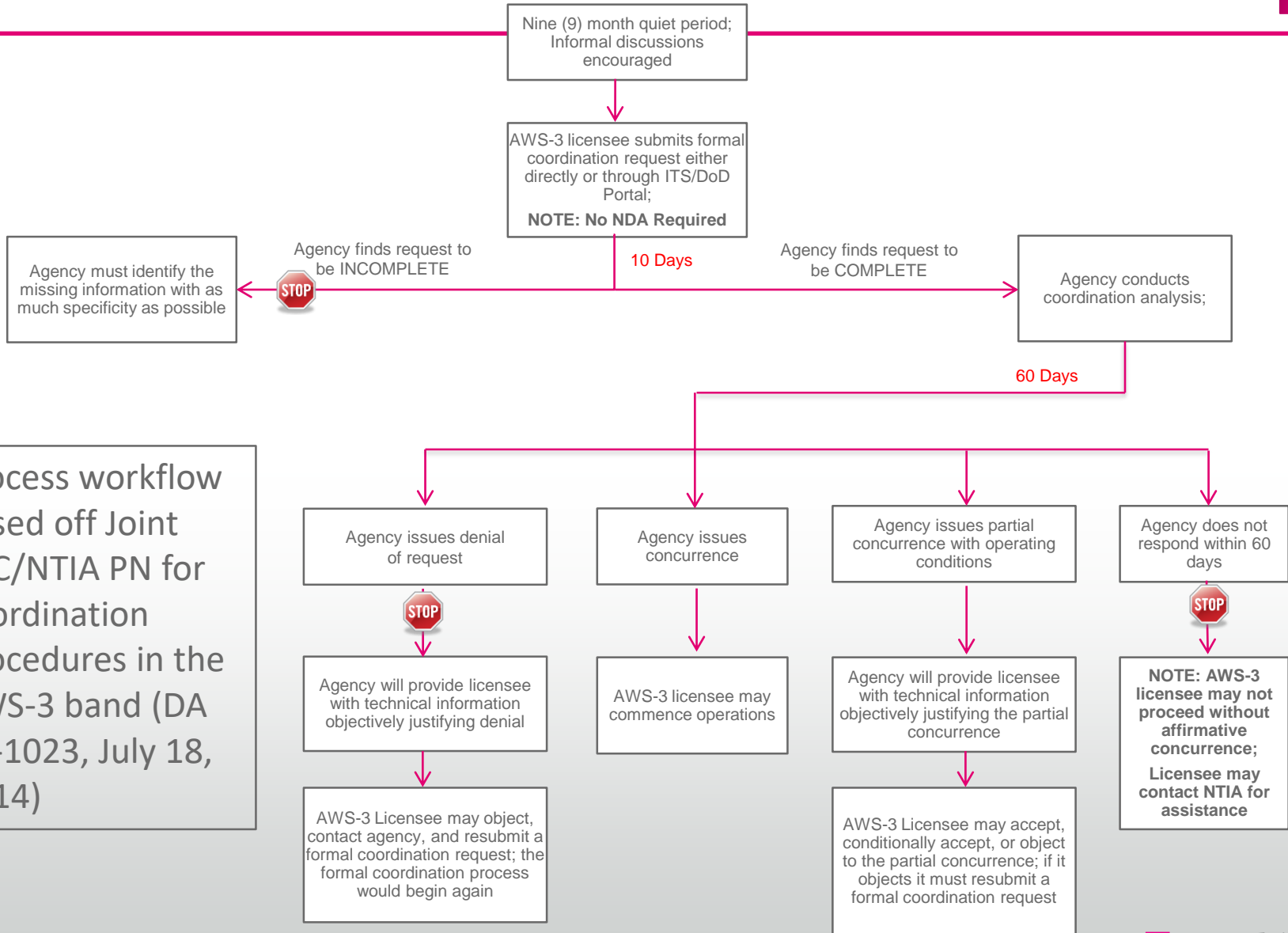
Sharing	SATOPS	<ul style="list-style-type: none"> Interference from satellite's ground station into eNBs Minimize via LTE features and external shielding techniques 	<ul style="list-style-type: none"> 21 sites across the country Impacted area radius ~ tens of Km
	JTRS	<ul style="list-style-type: none"> Interference from UEs and interference to eNBs Minimize via smart radio design techniques and LTE features 	<ul style="list-style-type: none"> 6 bases in AZ, CA, LA, NC, NM, TX Impact area radius ~ tens of Km
	ACTS	<ul style="list-style-type: none"> Interference from UE transmitters into our ACTS receivers Consider notching/RB blanking 	<ul style="list-style-type: none"> 2 ACTS Ranges in MT and WY Impact area radius ~ hundreds of Km
	Electronic Warfare	<ul style="list-style-type: none"> EW should not cause interference to terrestrial networks Operations would be limited to the federal ranges 	<ul style="list-style-type: none"> 22 major sites across the country
Temporary Sharing	Federal Systems	<ul style="list-style-type: none"> Temporary co-existence with federal systems that are expected to leave the band 18 months to 5 yrs. after auction Resort to the interference mitigation techniques mentioned above 	<ul style="list-style-type: none"> Number of sites depends on our deployment time frame Impact area radius ~ tens to hundreds of Km
Clearing	Commercial Microwave	<ul style="list-style-type: none"> Commercial microwave links in 2155-2180 MHz band Most cleared as part of AWS-1 clearing. Remaining links likely to be in more remote locations 	<ul style="list-style-type: none"> 250 fixed links and five BRS licensees

Types of Assignments: US&P and Non-US&P



- United States and Possessions (“USP”), allows operations throughout the country.
- All USP assignments will be transitioned out of the 1755-1780 MHz band. Mostly LE Video Operations.
- Non-USP assignments specify particular areas of operation. Most non-USP assignments will be transitioned out of the 1755-1780 MHz band
 - except for six sites at which Joint Tactical Radio Systems may operate,
 - the two polygons within which the Air Combat Training System may operate and
 - the 25 sites where federal earth stations may transmit.
- For both USP and non-USP assignments, the AWS-3 licensee must reach a coordination agreement with affected federal agencies before they may operate.
- No prior coordination is required for AWS-3 licensees operating on non-USP assignments outside of Protection Zones.

AWS-3 Workflow



Process workflow based off Joint FCC/NTIA PN for coordination procedures in the AWS-3 band (DA 14-1023, July 18, 2014)