

### **VDLM2** Implementation Plan

AFC Fall Meeting 2014

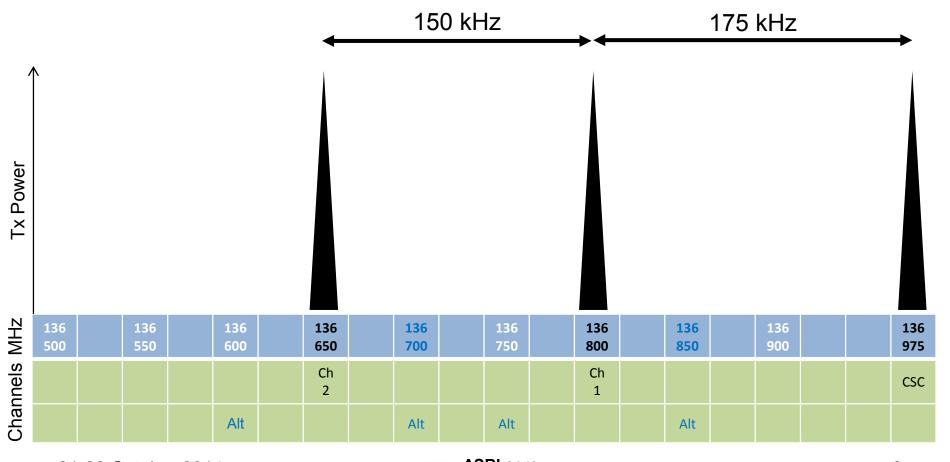


### **Background**

- ARINC/RC and SITA have formally requested additional VDLM2 channels
  - Future capacity required for AOC data growth
  - DataComm service requirements
- AFC channel plan created in 2010 for VDLM2 networks
  - Utilizes the upper 136 MHz band
  - Dedicated frequency for each DSP
  - Options for additional capacity
- VDLM2 signal not compatible with adjacent assignments
  - VDLM2 co-site interferes with adjacent users

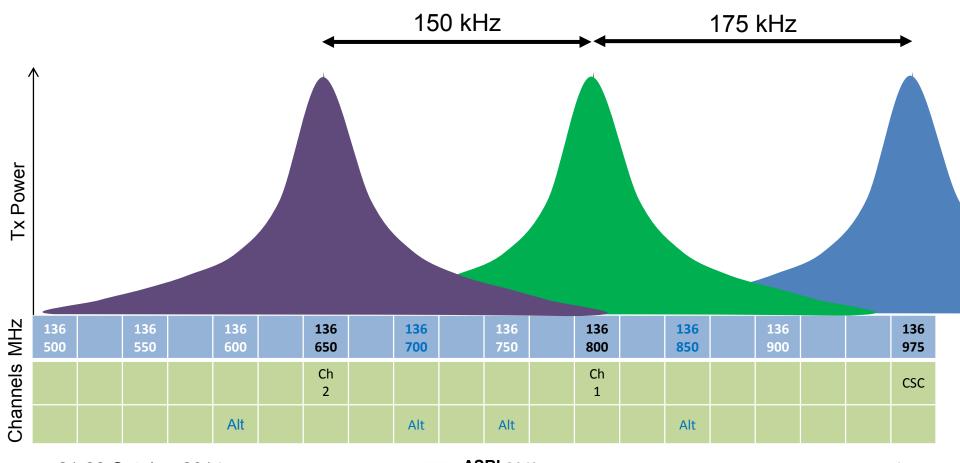


# **AFC Agreed VDLM2 Channel Plan**





#### **VDLM2** Co-site Coordination





### **Previous Meeting**

- ASRI proposed an implementation method after working with both DSPs.
  - Assign new VDLM2 channels while minimizing impact on existing users
- Planning for 4 phase process from initiation on 1 Jul 2014
  - 1. Reorganize lower AOC voice users
  - 2. Migrate affected voice users from upper AOC
  - 3. Migrate ACARS networks
  - 4. Assign new VDLM2 frequencies



### Planning considerations

- License modification costs
  - DSPs will subsidize regulatory costs
- Increased congestion in lower band
  - Interference mitigation
- Movement of SITA ACARS base frequency
  - Impact on spectrum and customers



#### **Progress**

- AFC approved implementation of Phases 1&2 to clear way for VDLM2
  - Migration of most upper band users
  - Clearing voice users on 129.350, 131.650, &131.725
     MHz for ACARS movement
  - Movement of de-icing users from 129.525 MHz starting next season
- ASRI has notified all 113 affected voice users
  - 54 have begun migration
  - Some users are remaining in the lower 136 MHz band (reorganizing to ensure frequency separation from VDLM2 assignments)



#### Plan modification

- Proposal to split Phase 3 into two parts (A&B)
  - 1. Reorganize lower AOC voice users
  - 2. Migrate affected voice users from upper AOC
  - 3. Migrate ACARS networks
    - A. Migration of ACARS assignments on 136.575, 136.650 and 136.800
    - B. Migration of ACARS on 136.850?
  - 4. Assign new VDLM2 frequencies



# **Phase 3A Proposal**

	2014	2015		2016		2017	
07/01	01/01	07/01	01/01	07/01	01/01	07/01	01/01
136.575	ACARS	ACARS Migration**	Cleared				
131.725*	Clearing Voice	<b>)</b>	ACARS				
136.650	ACARS	ACARS Migration**	VDLM2 ARINC/RC				
129.350	Cleared	<b>→</b>	ACARS				
136.800	ACARS				ACARS Migration	VDLM2	SITA
129.525	De-icing				<b>→</b>	ACA	RS



# **AFC Approval of Phase 3A?**



## **Going Forward**

- Complete voice user migration
- Discussions with SITA on ACARS base frequency move
- Finalize remaining plan phases at the next AFC meeting.



#### **Questions?**