

VDLM2 Implementation Plan

AFC Winter 2015



Background

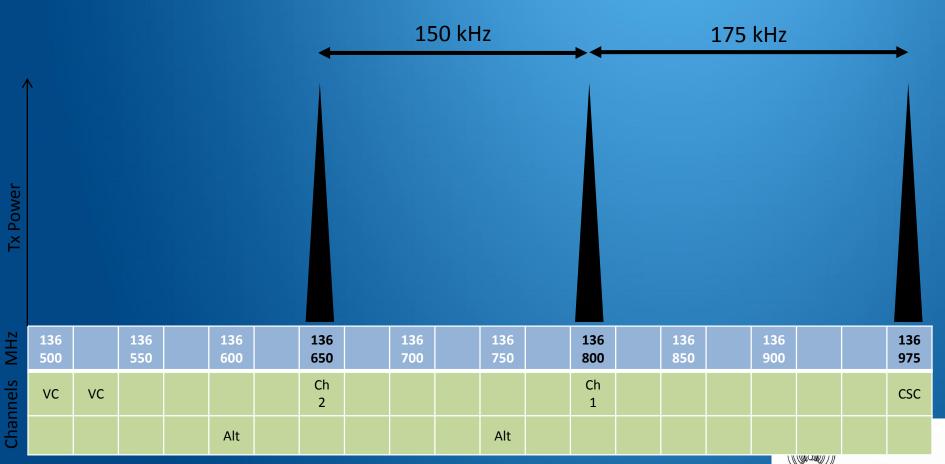


- ARINC/RC and SITA formally requested additional VDLM2 channels in 2014
 - Future capacity required for AOC data growth
 - DataComm service requirements
- AFC channel plan created in 2010 for VDLM2 networks
 - Utilizes the upper 136 MHz band
 - Dedicated frequency for each DSP
 - Options for additional capacity
- VDLM2 signal not compatible with adjacent assignments
 - VDLM2 co-site interferes with adjacent users



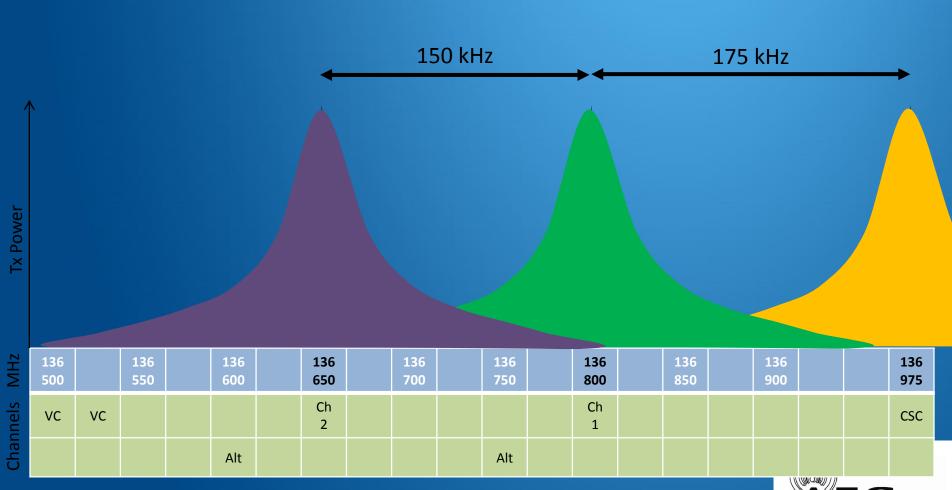
AFC Agreed VDLM2 Channel Plan





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



The Plan - Timeline



| | 2014 | 20: | 5 | | 16 | 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 | - | ACARS | | | | |
| | | | | | | | |
| 136.650 | ACARS | ACARS Migration** | VDLM2 ARINC/RC | | | | |
| 129.350 | Cleared |) | ACARS | | | | |
| | | | | | | | |
| 136.800 | ACARS | | ACARS Migration | | VDLM2 SITA | | |
| 129.525 | De-icing | | → | ACARS | | | |
| | | | | | | | |
| 136.850 | ACARS | ACARS | | | ACARS Migration** | | |
| 131.725* | Clearing Voice | → | | | | | ACARS* |

^{*}While consolidating 136.575 and 136.850 MHz into 131.725 MHz, any additional capacity assignments will be made on 131.650. This will be available from the 1 Jul 2015.



^{**}Date and actions subject to change. Awaiting formal request by SITA before being approved.

Plan modification



- Proposal to split Phase 3 into two parts (A&B)
 - 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



Progress at March 2015



- AFC approved implementation of phases 1,2, & 3a to clear way for VDLM2
 - Migration of some upper band users
 - Some users are remaining in the lower 136 MHz band (reorganizing to ensure frequency separation from VDLM2 assignments)
 - Clearing voice users from 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
 - Expected to complete by Apr 2015



Outstanding Work



- This meeting
 - Review Phase 3b options SITA ACARS base freq move
 - Discuss WG for VDLM2 Spectral Planning
- Ongoing
 - Channel planning for 9 VDLM2 channels
 - Canadian Coordination
 - FAA coordination



SITA Presentation



- Consider SITA presentation
 - Hear airline views and questions
 - Decide if vote suitable at this time
 - AFC vote for Phase 3b?



Ad-hoc VDLM2 Spectral Coordination Group



- Proposed composition
 - FAA Data Comm Engineering/spectrum office
 - Harris
 - Rockwell Collins/ARINC
 - SITA
 - ASRI
- Charter
 - To ensure spectrum availability for Data Comm and efficient use of VDL-2 spectrum
- Schedule
 - Proposed to align with ASRI AFC meetings
 - Request near-term focus to support Key Topics
- Key Topics
 - Spectrum request criterion
 - Coordinated spectrum plans for both ASRI and FAA bands
 - Spectrum request process and time line
- Report back to AFC on a regular basis





Questions?



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