

ICAO Meetings – Consolidated Update

AFC June 2016 Meeting



ICAO Meetings Updated



- Frequency Spectrum Management Panel
 - FSMP
- Euro Frequency Management Group
 - FMG



FSMP



- Next Meeting in Montreal
 - 6-16 September 2016
 - WG for 6-14 Sep
 - Panel for 15-16 Sep
- Expected work
 - Finalize initial ICAO position for WRC-19
 - Space-planes
 - GADSS
- Airlines strongly encouraged to attend
 - IATA or ASRI delegations



Euro FMG



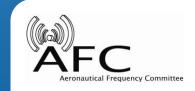
- 136.975 MHz, shared use between all users including airline operational data and air traffic control data, has contributed to performance issues
 - FMG has recommended multiple VDL frequencies and an optimized RF environment
- VDL Mode 2 capacity and measurement analysis is ongoing
 - FMG recommendation that datalink providers start off-loading the common signaling channel (CSC) 136.975 MHz as early as possible by using the second VDL Mode 2 frequency to be shared for ground and airborne use
 - Additional datalink frequencies are 136.725 MHz, 136.775 MHz, 136.825 MHz, 136.875 MHz
- VDL Mode 4 frequency is 136.925 MHz
 - In the EUR Region, all VDL Mode 4 ground and aircraft stations shall only operate on 136.925 MHz



Schedule for Euro VDL changes



- March 2016 136.750 MHz POA ceased
 - SITA offloads all POA from 136.750 MHz to OPC band in Europe and ceases operations on this channel
 - This enables the next sub-band transition step (opening of second dedicated VDL2 aux channel)
- June 2016 136.725 MHz POA ceased
 - ARINC initiated offload of all POA traffic and starts migrating VDL2 service from 136.875 to 136.725
 - Transition to be complete by August/September 2016



Upcoming VDL assignments



- Next step: Enroute auxiliary frequencies
 - SITA expects to apply soon for 136.775 MHz enroute traffic
 - ARINC expected to apply for 136.825 MHz in near future
- Eventual VDL configuration
 - One Common signaling channel
 - Two frequencies for SITA (terminal and enroute)
 - Two frequencies for ARINC (terminal and enroute)



European Draft datalink allotment plan



		Draft Revised Data Link Allotment Plan															
MHz	131,525	131,725	131,825		136,675	136,700	136,725	136,750	136,775	136,800	136,825	136,850	136,875	136,900	136,925	136,950	136,975
ICAO current plan	ACARS SITA	ACARS SITA	ACARS ARINC		Analog voice	"_"	M2	"_"	M4	"_"	M2, ENR shared	"_"	M2, TMA shared	1.	M4, CSC	"."	M2, CSC shared
Current use	ACARS SITA	ACARS SITA	ACARS ARINC		Analog voice	"_"	ACARS ARINC until 2016	ACARS SITA until 2016				"_"	M2, shared	"_"		"_"	M2, CSC shared
Transition Step 1 Mid 2015	ACARS SITA	ACARS SITA	ACARS ARINC		Analog voice	"_"	ACARS ARINC until 2016	ACARS SITA until 2016				"_"	M2, GND, SITA and GND + AIR, ARINC	"_"	M4, CSC	"_"	M2, CSC shared
Transition Step 2 End 2015	ACARS SITA	ACARS SITA	ACARS ARINC		Analog voice	"_"	ACARS ARINC ceases operation	ACARS SITA until 2016				"_"	M2, GND, SITA and GND + AIR, ARINC	"_"	M4, CSC	"_"	M2, CSC shared
Transition Step 3 Mid 2016	ACARS SITA	ACARS SITA	ACARS ARINC		Analog voice	==		ACARS SITA until 2016				=_=	M2, GND, SITA and GND + AIR, ARINC	 	M4, CSC	"_"	M2, CSC shared
Transition Step 4 End 2016	ACARS SITA	ACARS SITA	ACARS ARINC		Analog voice	=_=	M2, GND + AIR, SITA advertised network	ACARS SITA until 2016				"."	M2, GND + AIR, ARINC advertised network	"_"	M4, CSC	"_"	M2, CSC shared
Draft proposed ICAO revised plan	ACARS SITA	ACARS SITA	ACARS ARINC		Analog voice	= =	M2, GND, [SITA] advertised network	"_"	M2, AIR, [ARINC] advertised network	"_"	M2, AIR, [SITA] advertised network	= =	M2, GND, [ARINC] advertised network	"-"	M4, CSC	"_"	M2, CSC shared

Figure 1 - draft revised data link allotment plan

GND - ground use means that a channel is used by aircraft stations with its "wheels on the ground".

AIR - airborne use means that a channel is used by aircraft stations when airborne.

Additional note: For dual squitter systems an alternative use of the VDL M2 identified frequencies (i.e. 136.725 MHz, 136.775 MHz, 136.825 MHz and 136.875 MHz), including its sharing principles, may be accepted under the condition that any such use should be subject to a FMG coordination.



Further study is required



- FMG will continue to work with UK NATS, Airbus, Boeing, ENAV, SITA and ARINC to review
 - VDL performance analysis
 - Multi frequency options
 - RF modeling and testing
- FMG Coordination meeting in Toulouse June 2016
- FMG Plenary meeting in November 2016

