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**To** DLK Systems Subcommittee      **Date** July 29, 2008  
**From** Mike Russo      **Reference** 08-116/DLK-034 sap  
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**Subject**      **Circulation Prior to Adoption Action**  
**Draft 4 of Supplement 5 to ARINC Specification 631: VHF Digital Link**  
*(VDL) Mode 2 Implementation Provisions*

**Summary**      The Industry Activities staff prepared this draft based on recommendations from the DLK Systems Subcommittee meeting held April 1-3, 2008. Eurocontrol has predicted that congestion will become a factor to the point that VDL Mode 2 (VDLM2) performance could be degraded by 2010.

The functionality of this specification is based on the ICAO VDL Mode 2 SARPs. ICAO has removed the Link and Subnetwork specifications, moving them into a document called the ICAO Doc 9776 Manual on VDLM2. An accommodation of this new construction has been made by updating the ICAO references.

This draft incorporates the definition of Autotune, consistent with the ICAO Manual on VDLM2. This draft also defines an elegant implementation of VDLM2 frequency change that enables the aircraft to select a secondary frequency without the overhead of autotune. The technique, which utilizes the Frequency Support List in GSIF uplinks, differentiates between aircraft that are on the ground and those that are airborne. While consensus was achieved in favor of this approach, Airbus and Rockwell Collins have expressed their reservations due to the lack of schedule commitment on the part of DSPs to offer this service. Another change is the reduction of the importance of the X.121 address in the squitter. A subtle improvement is introduced in the use and response to the Called Line Address Modification Notification (CLAMN) primitive.

All technical changes are shown in **blue bold**. The most current changes are also **highlighted**. Text that has been deleted may or may not be shown in ~~striketrough~~ depending on the extent of the deletions.

**Action**      Please review this draft. If you have any comments, please respond in writing (e-mail) to Mike Russo.

If there are no adverse technical comments received by **August 29, 2008**, Draft 4 of Supplement 5 to ARINC Specification 631 will be submitted for adoption consideration by AEEC via mail ballot.

**cc**      DLK Users Forum