



**INTERNATIONAL CIVIL AVIATION ORGANIZATION  
ASIA AND PACIFIC OFFICE**

**STRATEGY FOR IMPLEMENTATION OF THE AIR-GROUND  
DATA LINK IN THE ASIA/PAC REGION**

**August 2005**

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DATA LINK IN THE ASIA/PAC REGION**

**Considering:**

- a) the benefit of data communications to improve safety, efficiency and capacity through the reduction of voice communications and process automation to meet the operational requirement and consistent with the Air Traffic Management Operational Concept;
- b) current operation application of data link to support CPDLC, ADS-C, PDC and D-FIS, the need to maintain the functional service of these applications;
- c) current technology such as VHF ACARS, VDL-Mode 2 AoA (ACARS over Aviation VHF Link Control), VDL-Mode 2 ATN, Satellite datalink, HF data link being acceptable for operations and standardized in SARPs and/or industry standards;
- d) availability of standardized VDL-Mode 3, VDL-Mode 4, Mode S data links and future standardized technology such as Universal Access Transceiver (UAT );
- e) the future growth of data communications to improve operations and the exchange of information including graphical meteorological information; and
- f) the need to assure global interoperability and harmonization.

**THE GENERAL STRATEGY FOR THE IMPLEMENTATION OF THE AIR-GROUND  
DATA LINK INFRASTRUCTURE AND ASSOCIATED APPLICATIONS IN THE ASIA/PAC  
REGION SHOULD BE AS FOLLOWS:**

- a) maintain or ensure compatibility of existing data links to support all current ATM and meteorological applications without change to the application or application specific system.
- b) new installation of VHF datalink systems should be capable of supporting VDL-Mode 2 and as an interim step provide the bridging application of AoA.
- c) in the near term there is no intent to implement VDL-Mode 3, VDL-Mode 4 or Mode S.
- d) undertake and monitor research and development of communications technology for the future evolution of data link services.
- e) States should work co-operatively to assist each other on a multinational basis to implement the air-ground ATN compliant VDL-Mode 2 service and ensure system inter-operability.

Note:

Near-Term: now to 10 years

Long-Term 15+

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