AIRTEL ATN

THE DATA LINK COMPANY

AIR NAVIGATION SERVICE PROVIDERS

DATA LINK SOLUTIONS

We provide operational and test Data Link solutions to Air Navigation Service Providers(ANSPs) in America, Asia and Europe. 60% of European ANSPs use Airtel ATN to support the min meeting the European Data Link mandate.

OVER 25 YEARS IN BUSINESS

ACTIVE IN 36 COUNTRIES

24 EUROPEAN ANSP CUSTOMERS

SOFTWARE INSTALLED ON OVER 11,000 AIRCRAFT

Airtel is pivotal in driving innovation in Data Link, shaping the future as partners of SESAR JU, SESAR Deployment Manager, and Iris.

sesar DEPLOYMENT MANAGER

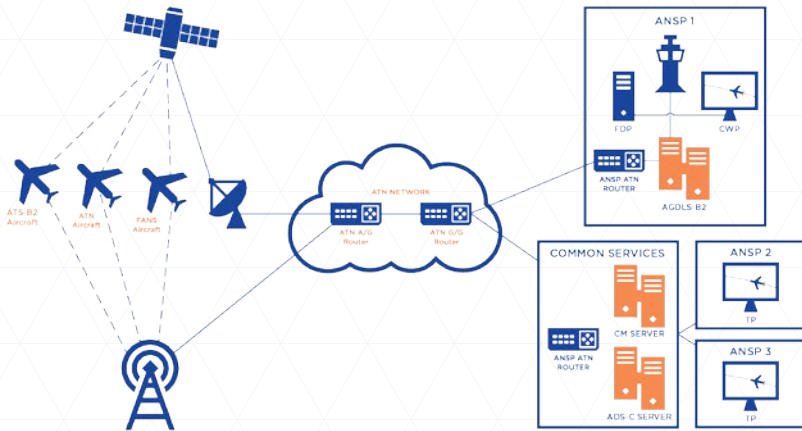FOUNDING MEMBER **sesar** JOINT UNDERTAKING

iris

EUROPEAN COMMISSION DATA LINK MANDATE

The European Commission has mandated that all ANSP's must support ATS-B2 applications. The implementation deadline is set for the 31 of December 2027. Designed with a goal to modernize the European ATM Industry, the regulation aims to create a more efficient, dependable and environmentally friendly European ATM system.

TRUSTED BY

austro CONTROL

BULATSA

CROATIA CONTROL

Air Navigation Services of the Czech Republic

NAVIAIR

ESSP

DSNA

DFS Deutsche Flugsicherung

HungaroControl

isavia

AIRNAV IRELAND

ENAV

LGS LATVIJAS GAISA SATIKSME

ORO NAVIGACIJA

MATS MALTA AIR TRAFFIC SERVICES

M-NAV

NAV PORTUGAL

romatsa

smatsa

SLOVENIA CONTROL

ENAIRE

LFV

skyguide

AIR/GROUND DATA LINK SERVER DL-FEP B2

Air/Ground Data Link System DL-FEP is responsible for handling Data Link communications for an ATC center. It supports applications such as CM, CPDLC B1/B2 and ADS-C.

It is deployed on a redundant operational/standby configuration and has been easily integrated with multiple system integrators. The AGDLS/DP-FEP is responsible for implementing DLIC for aircraft logon, ACM for CPDLC communications management, ACL for clearances and AMC to check microphone status.

ANSP ROUTER

The ANSP ATN Router provides ATN connectivity between the ATC System and the ATN Network. The Router is composed of two independent nodes working in operational/standbymode.
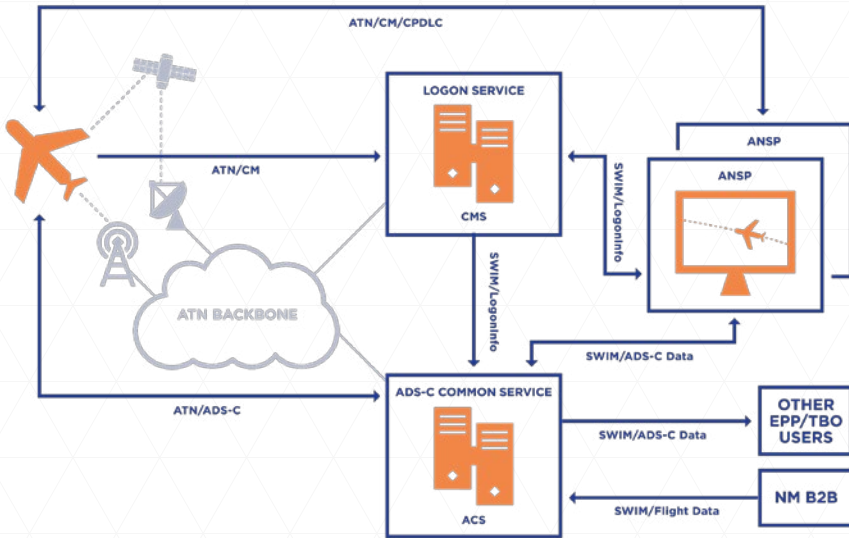
Our competitively priced router delivers long-term savings, enhanced efficiency, and easyintegration with your existing infrastructure. Built on RHEL-compatible systems, it ensures top-tier security and dependable performance.

ANSP MONITORING

The Protocol Decoder (PDEC) is a protocol analyser that decodes captured logs andgenerates LISAT Files and GOLD reports. ANSPs are encouraged to share CPDLC data in LISAT Format to EUROCONTROL-NM to help monitoring the Data Link performance.

Our Protocol Decoder supports detailed performance reporting, including metrics such as transaction delays, error rates, and fleet equipage. This provides ANSPs with valuable insights for communication performance analysis and system improvements.

A flight data link system diagram showing: ATN/CM/CPDLC, LOGON SERVICE (CMS), ATN/CM, ATN BACKBONE, ATN/ADS-C, ADS-C COMMON SERVICE (ACS), ANSP, SWIM/LogonInfo, SWIM/ADS-C Data, OTHER EPP/TBO USERS, NM B2B, SWIM/Flight Data

B2 DATA LINK COMMON SERVICES

Airtel provides its CM Server product (CMS) and ADS-C Server product (ACS) to address our customers' needs for the European CP1 Mandate Data Link implementation. They are designed to provide common data link services within a specific region. Airtel CMS and ACS are built upon our well-established Airtel ATN software, which has been developed over the last 25 years.
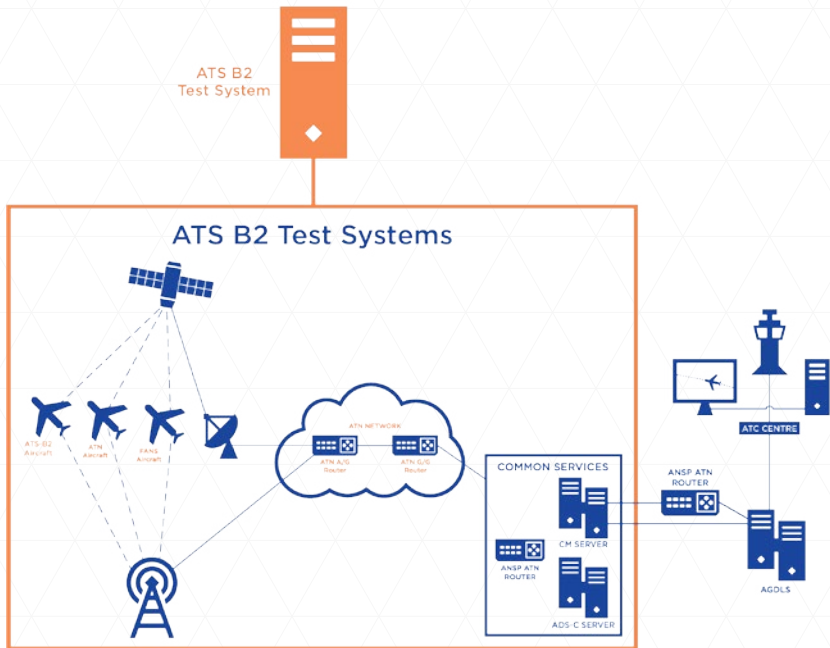
Our Airtel End Systems, compliant with B1 standards, have been operational across 12 European ANSPs since 2010. The CMS and ACS were used in SESAR 2020 PJ31/PJ38 and SESAR 3 HERON to demonstrate the value of ADS-C common service to collect and distribute ADS-C data from flights.

BENEFITS

Benefits for Airlines include optimized climb and descent profiles, more efficient routing with fewer miles flown, fuel savings, and reduced CO_2 emissions—enabling greener flights.

For ANSPs, it reduces controller workload and allows easier validation of FMS trajectories. A common service lowers deployment costs, optimizes bandwidth usage and simplifies data link implementation. It increases network capacity by supporting a high number of clients.

ATS B2
Test System

ATS B2 Test Systems

ATN NETWORK

ATN A/G Router

ATN G/G Router

ATS B2 Aircraft

ATN Aircraft

FANS Aircraft

COMMON SERVICES

CM SERVER

ANSP ATN ROUTER

ADS-C SERVER

ANSP ATN ROUTER

ATC CENTRE

AGDLS

ATS B2 TEST SYSTEMS

Our test tool suite is designed to support testing aimed at ensuring compliance and certification, supporting both ATN B1 and ATS B2. Our test suite provides solutions for manual and automated testing including the emulation of ATN networks.

Our tools support all CPDLC message sets as defined in ED-110B and ED-229B and include rigorous error testing for both CPDLC and ADS-C protocols. With automatic message generation, detailed logging, and the ability to test with control of 1,000 ATN aircraft, our tools help streamline testing and validation processes ensuring your successful transition to B2 compliance.

LACS/SWIM SIMULATOR

Our LACS/SWIM Simulator emulates both the CM Common Service and the ADS-C Common Service. It provides ATN and SWIM interfaces to connect with ANSPs automation systems and simulates Air/Ground ATN data link exchanges, including all protocol messages.

The LACS/SWIM Simulator assists ANSP systems in the design, implementation, and compliance with the CP1/AF6 mandate. It offers an easy-to-deploy solution that requires no coordination with CSPs or avionics.

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SCAN

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