

AIRTEL ANSP CUSTOMERS



Air Navigation Services
of the Czech Republic



DSNA



EUROCONTROL



HungaroControl Zrt.



AirNav Indonesia



Japan Civil Aviation Bureau



ISAVIA



LATVIJAS Gaisa Satiksme



MALTA AIR TRAFFIC SERVICES



NAV Portugal, EPL



VALSTYBES ĮMONĖ
ORO NAVIGACIJA



skyguide



SLOVENIA
CONTROL

COMPLIANCE

EU CPDLC mandate

- ◆ European Commission Regulation EC No. 29/2009, amended by EC 2015/310
- ◆ EUROCONTROL DataLink Specification EC-SPEC-0116
- ◆ EUROCONTROL SAM SWAL 3 (ED-109/DO-278 AL4)
- ◆ ETSI EN 303 214

ATN

- ◆ ED-110B/DO-280B
- ◆ ED-120/DO-290
- ◆ ED-111
- ◆ ICAO SARPS 9705 (v2) and SARPS 9880

FANS

- ◆ ED-154/DO-305
- ◆ ED-100A/DO-258
- ◆ ARINC 622/620/618
- ◆ MATIP RFC 2351

ANSP DATA LINK EVOLUTION

Airtel is committed to maintaining compliance to the latest FAA and EUROCONTROL standards and is at the forefront of data link evolution for future data link applications (ATN-B2), network (ATN-IPS) and sub-networks (LDACS, Satellite, AeroMACS).



THE DATA LINK COMPANY



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AIR NAVIGATION SERVICE PROVIDERS
DATA LINK SOLUTIONS

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21 YEARS IN
BUSINESS

AIRTEL IS THE DATA LINK COMPANY

We deliver Air Traffic Management (ATM) modernisation through the implementation of data link software, infrastructure and test solutions for both ground and air.

Our vision is to continually evolve and improve data link to deliver greater efficiency and effectiveness of ATM.

21 YEARS IN BUSINESS

ACTIVE IN **36 COUNTRIES**

15 EUROPEAN ANSP CUSTOMERS

SOFTWARE INSTALLED IN **6000 AIRCRAFT**

Airtel is pivotal in driving innovation in data link, shaping the future as partners of SESAR JU, SESAR Deployment Manager, IRIS, Clean Sky 2 and NextGen.

SESAR
DEPLOYMENT MANAGER

SESAR
JOINT UNDERTAKING

NextGEN

iris

Clean Sky
JOINT UNDERTAKING

EUROPEAN COMMISSION DATA LINK MANDATE

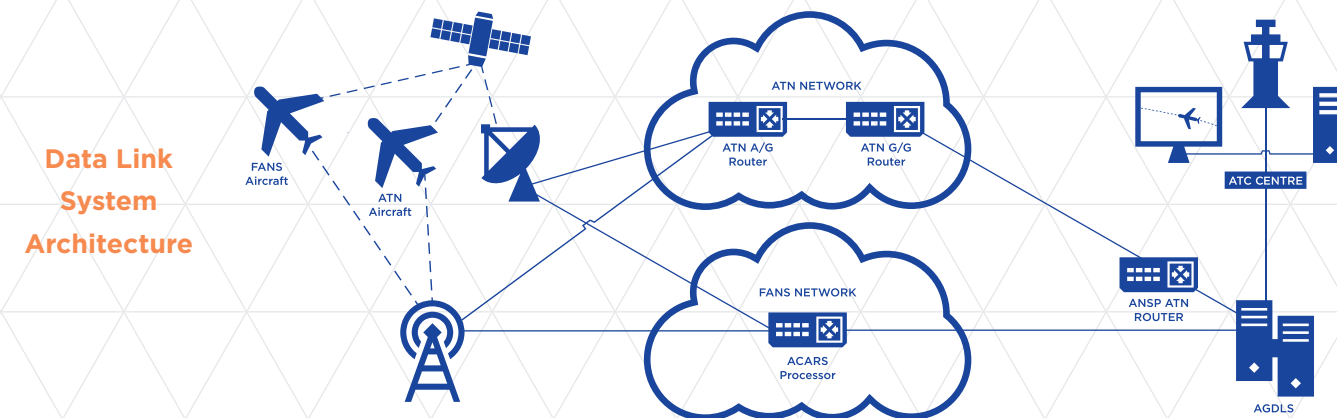
The European Commission has mandated SESAR Deployment Manager to develop a Data Link Services (DLS) recovery Plan (2016 and 2017 CEF Transport Calls). Airtel is a key partner in the 2017 CEF Transport Call and is actively designing the future Common European ATN Backbone (CEAB).

In addition, based on SESAR 2020 and IRIS activities Airtel is working to support the ATN/OSI Multilink (VDLM2 and SATCOM).

15 European ANSP's have met the Data Link Mandate with support from Airtel's operational and test solutions.

Airtel continue to assist ANSPs in meeting the European Commission Data Link Requirements.

ANSP OPERATIONAL SYSTEMS



AIR/GROUND DATA LINK SERVER (AGDLS)

Air/Ground Data Link System (AGDLS) is responsible for handling data link communications for an ATC centre. It supports applications such as CM, CPDLC and ADS-C.

Data Link Service Functions include:

- ◆ Data link Initiation Capability (DLIC)
- ◆ Air Traffic Clearance (ACL)
- ◆ ATC Communications Management (ACM)
- ◆ Aircraft Microphone Check (AMC)

The AGDLS interfaces with ATN and FANS networks.

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/standby mode.

BENEFITS

ADAPTABLE

Airtel understands that each ANSP has specific requirements and adapts core technologies to meet those needs, working directly with the ANSP or their chosen system integrator.

PROVEN TECHNOLOGY

Airtel has operational AGDLS systems and ATN Routers in ANSPs across Europe. Airtel is the chosen integration partner for companies including AZIMUT, Leonardo, INDRA, NavPortugal, Si ATM, Airtel Routers are key components in the ARINC/RC-IMS Network.

EXPERIENCED

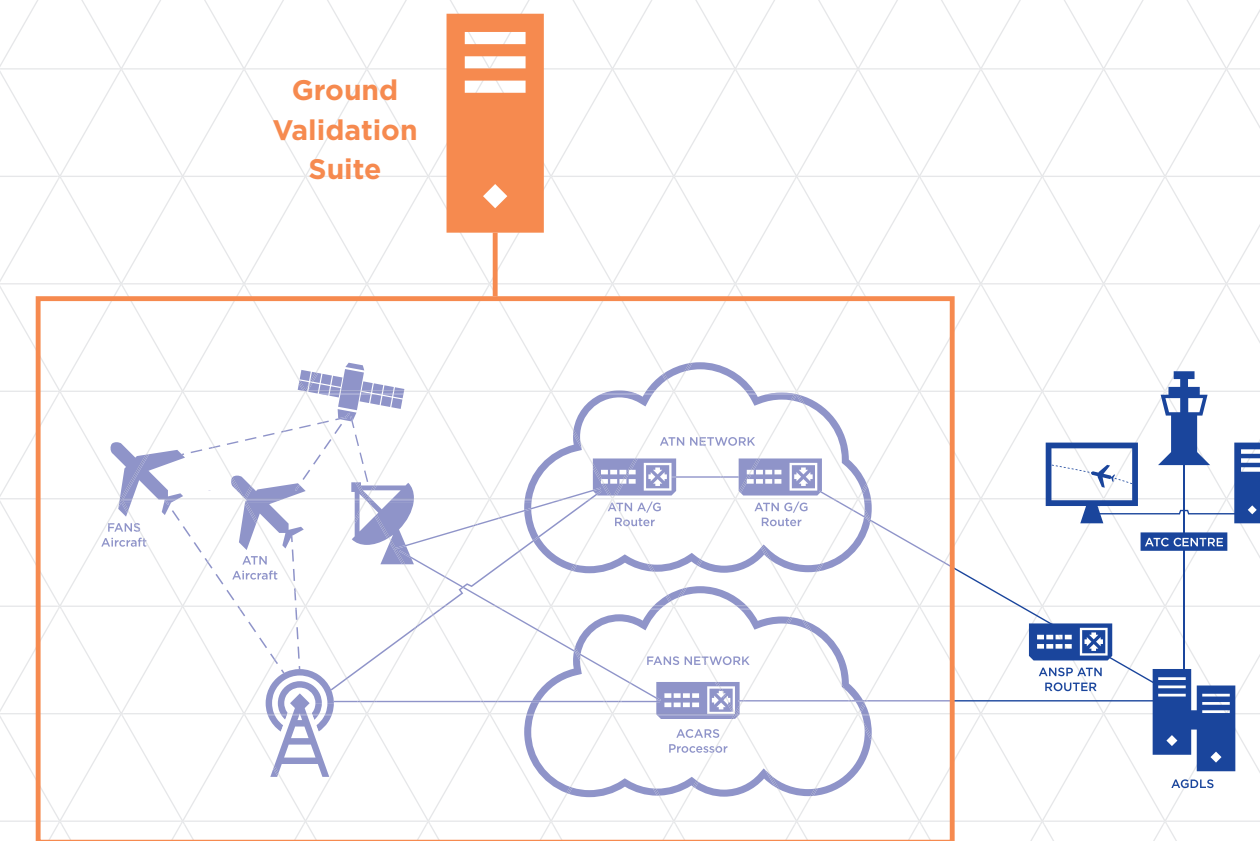
Airtel has 21 years of experience in data link and remains solely focused on developing and delivering data link solutions and services.

ANSP MONITORING

The **Protocol Decoder (PDEC)** is a protocol analyser that decodes captured logs and generates 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.

VALIDATING ANSP SYSTEMS



GROUND VALIDATION TEST SYSTEM (GVS)

The GVS provides ANSPs with an independent means to validate their CPDLC data link deployments.

The GVS is easy to set up and requires no coordination with CSP or Avionics. The user interface provides an intuitive platform for the user to send and receive messages and achieve an end to end test of the ANSP data link equipment.

The GVS emulates up to 1,000 aircraft (ATN or FANS) in one PC to provide a realistic test scenario for the ANSP.

In addition, the GVS can be used as a Shadow Test system to create realistic training scenarios for Air Traffic Controllers in their shadow systems.

BENEFITS

ADAPTABLE

Airtel GVS can connect to ANSP CPDLC System as an ATN Router or as an ATN CSP Network. It has been used to test a variety of FDPS/AGDLS systems and supports CPDLC messages.

PROVEN TECHNOLOGY

15 ANSPs in Europe have used Airtel Test Equipment to validate ANSP data link systems.

EXPERIENCED

Airtel Test Equipment are the de-facto industry standard for testing and validating ATN implementations.