



## On-site Test Services for the Irish Aviation Authority

### OBJECTIVES

- ◆ Meet European safety standards
- ◆ Test FANS/ATN system
- ◆ Test CPDLC scenarios

### WHY AIRTEL ATN?

- ◆ Independent of ACSP
- ◆ Only external FANS testing available
- ◆ 20 years industry experience
- ◆ International customer base

### RESULTS

- ◆ Successful testing of 300 aircraft (150 FANS and 150 ATN)
- ◆ Problems identified prior to site acceptance
- ◆ Identified problems resolved by Thales saving IAA money



### BACKGROUND

The IAA is a commercial semi-state company employing approximately 700 people at 6 locations around Ireland. It regulates the Irish civil aviation safety standards and provides air traffic management and aeronautical communications services in 451,000 square kilometres of Irish controlled airspace. The authority ensures that Irish civil aviation operates to standards set internationally and handles 80% of all flights that cross the North Atlantic from the Shannon centre.

FANS (Future Air Navigation System) is an Air/Ground Data Link system which provides text-based communication between the pilot and the Air Traffic Controller. FANS is used in Oceanic air space including North America while the ATN is used primarily in European air space.

### ENABLING TECHNOLOGY

Airtel ATN's GVS-FANS (Ground Validation Software) was used during the validation of IAA's Thales COOPANS system. The software enables the simulation of up to 1,000 aircraft connecting to the IAA via an emulated MATIP (Mapping of Airline reservation, ticketing and messaging Traffic over TCP/IP connection). The Test Service solution depicted valid and invalid CPDLC test scenarios such as clearance, microphone check and ATC transfer.

### RESULTS

Using Airtel ATN's Test Service, the IAA tested its FANS/ATN based system prior to site acceptance. This meant that any identified problems could be resolved by Thales prior to final sign-off. Because issues were identified and resolved early, the IAA saved money as costs are incurred if problems are identified after final validation.

“ The IAA is committed to safety, and is one of the pioneers in the commissioning of FANS-1/A in continental airspace. IAA needed to ensure validation was done effectively and efficiently. Airtel ATN was instrumental in helping us validate our system to ensure it was working in line with the directives. ”

**Patrick Tarrant, Manager,  
Flight Data Processing Systems, IAA**