

FINALIST

LUFTHANSA

ACHIEVEMENT

Mobile Internet access on board airliners



Lufthansa and its internet service provide, Connexion by Boeing, provide working conditions in flight comparable to those on the ground.

There was an era when some executives regarded flights as a time when they could escape contact with their offices. That attitude has largely evaporated as the business world becomes ever more competitive and those executives feel they can no longer afford to be out of touch for several hours while at FL350.

Lufthansa claims three achievements:

- First implementation of public broadband internet access on board an aircraft;
- First implementation and certification of public wireless local area network (WLAN) on board;
- Worldwide coverage in the air and on the ground by implementation of internet access through WLAN in all 55 Lufthansa lounges worldwide.

The world's first passenger flight with broadband internet access departed on 15 January 2003 and Lufthansa passengers were able to test the new service until 18 April 2003 on flights between Frankfurt and Washington DC.

In partnership with its internet service provider, Connexion by Boeing, Lufthansa says it was able to offer working conditions in flight comparable with state-of-the-art internet services on the ground. Services on offer included:

- Information via the Lufthansa FlyNet Portal;

- Internet surfing;
- Access to intranet/company networks via Virtual Private Network (VPN);
- Transmission and reception of e-mails with attachments via a passenger's normal e-mail account.

During the trials, 155 commercial flights were operated. On average, 50-80 users were online per flight. Data transmission speed was comparable with ISDN or better and Lufthansa reports that most of its customers showed great interest in using their own laptops with VPN to access their company networks.

The heart of the system are transmit-and receive antennas developed by Connexion by Boeing. Mounted on top of the aircraft, they point to geostationary TV satellites regardless of pitch, attitude and speed of the aircraft.

At most seats, network jacks are available to connect a laptop via a network cable. However, the most comfortable way to connect, says Lufthansa, is through WLAN, available throughout the cabin.

Following these trials, Lufthansa decided to install broadband internet on board its 78-strong long-haul fleet and a contract with Connexion by Boeing was signed in May 2003. Routine operation is planned to start shortly.

FINALIST

B/E AEROSPACE

ACHIEVEMENT

Minipod lay-flat business seat

Business-class cabins have always been the scene of fierce competition between airlines, given the fact that their occupants punch well above their weight in revenue terms.

That competition has become particularly intense since 11 September 2001; many airlines have found load factors creeping steadily back upwards since that fateful date, but it has been the back of the aircraft that has been full, at modest ticket prices, while passengers who would normally have occupied the front cabins have downgraded to premium economy, or deserted the mainline carriers completely in favour of low-fare operators.

With that background, anything that can give an airline a fractional edge in attracting back valuable business-class passengers has been worth pursuing and, in the past few years, lay-flat seats have become the new battleground.

Over the last five years B/E Aerospace has developed a lay-flat business class seat that has captured the lion's share of the market. It has, says the company,

arguably the longest bed length and width of any business-class seat and is now challenging the first-class product.

Among major international carriers to have installed the B/E Aerospace seat is Japan Air Lines; installed in the airline's Executive Class, the seats measure up to 23.5in wide and are equipped with a pneumatic lumbar-support system, a 57in minimum seat pitch, a privacy partition and an LED reading light in the back. The designers at B/E Aerospace Design Studio also built 10.4in monitors, which they claim are the largest among the world's airlines.

In addition to this, B/E Aerospace has won three international design awards for the product, which the company believes is an industry first — particularly as it is B/E Aerospace and not a design agency that is named as designer of the product.

In third party testing and in airline analysis, says B/E Aerospace, it has been told that the seat possesses the best mechanism and features in the industry.