The European Aviation Network is the world’s first integrated satellite and air to ground connectivity network, designed to meet the needs of Europe’s congested skies. Ideal for narrow body aircraft and cost-effective to install and run, EAN promises seamless, high-speed passenger Wi-Fi across 30 European nations. Developed by a partnership of world-leading companies, EAN has been built by Europe for Europe to give European aviation a global advantage.

ADVANTAGES FOR EUROPEAN AIRLINES

Connecting European aviation requires a revolutionary solution. With close to 30,000 aircraft in some of the world’s most congested airspace with busy hubs in close proximity and data-hungry traffic on the rise, capacity demands are uniquely challenging. EAN is tailor-made to meet these needs.

Unrivalled service quality
Seamless, high-speed passenger broadband initially across 30 European nations.

Ancillary revenue
A powerful platform to unlock valuable new revenue streams.

Lower costs
Lightweight, low-drag, low maintenance equipment with a lower total cost of operation than any competitive solution.

Guaranteed speed
Market-leading data rate to the aircraft, with bandwidth allocated dynamically on demand.

Lower latency
As low as 40 milliseconds, unprecedented in aviation, improving passenger experience.

Fit for the future
Unique architecture capable of growing capacity flexibly and cost effectively to keep pace with demand.

HOW EAN WORKS

EAN integrates Inmarsat’s advanced S-band satellite with Deutsche Telekom’s complementary LTE network to provide high-capacity coverage for Europe. Aircraft carry small, lightweight terminals to connect with satellite and ground networks; a solution that combines the best of both worlds.
FLEXIBLE, SCALABLE CAPACITY, DEPLOYED WHERE IT’S NEEDED MOST

Complementing pan-European satellite coverage, EAN’s LTE capacity is designed to address Europe’s highest traffic regions. Around 300 network towers deliver up to 75 Mbps with a range up to 150km.

Crucially, EAN is uniquely flexible and scalable to meet growing passenger demand now and into the future. Available bandwidth can be multiplied rapidly by either increasing the number of antennas on an individual tower (sectorisation) - which nearly doubles the available capacity from each tower - or through the construction of additional towers (densification) in busier locations.

SECTORISATION

<table>
<thead>
<tr>
<th>SINGLE CELL SITE</th>
<th>SITE CAPACITY = 225 Mbps</th>
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</thead>
<tbody>
<tr>
<td>3 SECTORS 75 MBPS PER SECTOR</td>
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DENSIFICATION

| SMALLER CELL SIZE INCREASES THE NUMBER OF CELLS AND CAPACITY IN ANY GIVEN AREA |
| CLUSTER CAPACITY = 1575 Mbps |

LIGHTWEIGHT, LOW-DRAG EQUIPMENT

Pocket-sized antennas and low weight, low volume boxes make EAN the ideal solution for narrow body aircraft.

GROUND NETWORK ANTENNA

- Weight: 0.3kg
- Dimensions: 118 x 64 x 56mm
- Dual linear polarisation
- MIMO support

MSS SATELLITE ANTENNA

- Weight: 5.5kg
- Electronically steered
- Integrated HPA/LNA
- Integrated S/L band converter

REMOTE RADIO HEAD

- Weight: 4.5kg
- Dimensions: 292 x 174 x 101mm
- ARINC 763 E LTE Release 10 compliant
- Passively cooled

BASEBAND MODEM UNIT

- Weight: 2.5kg
- Dimensions: 292 x 174 x 101mm
- ARINC 763 compliant
- Passively cooled

MSS SATCOM TERMINAL

- Weight: 4.5kg
- ARINC 429 inputs / discrete inputs
- ARINC 600 compliant – 2MCU
- ARINC 615 support

TO LEARN MORE ABOUT THE EUROPEAN AVIATION NETWORK

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