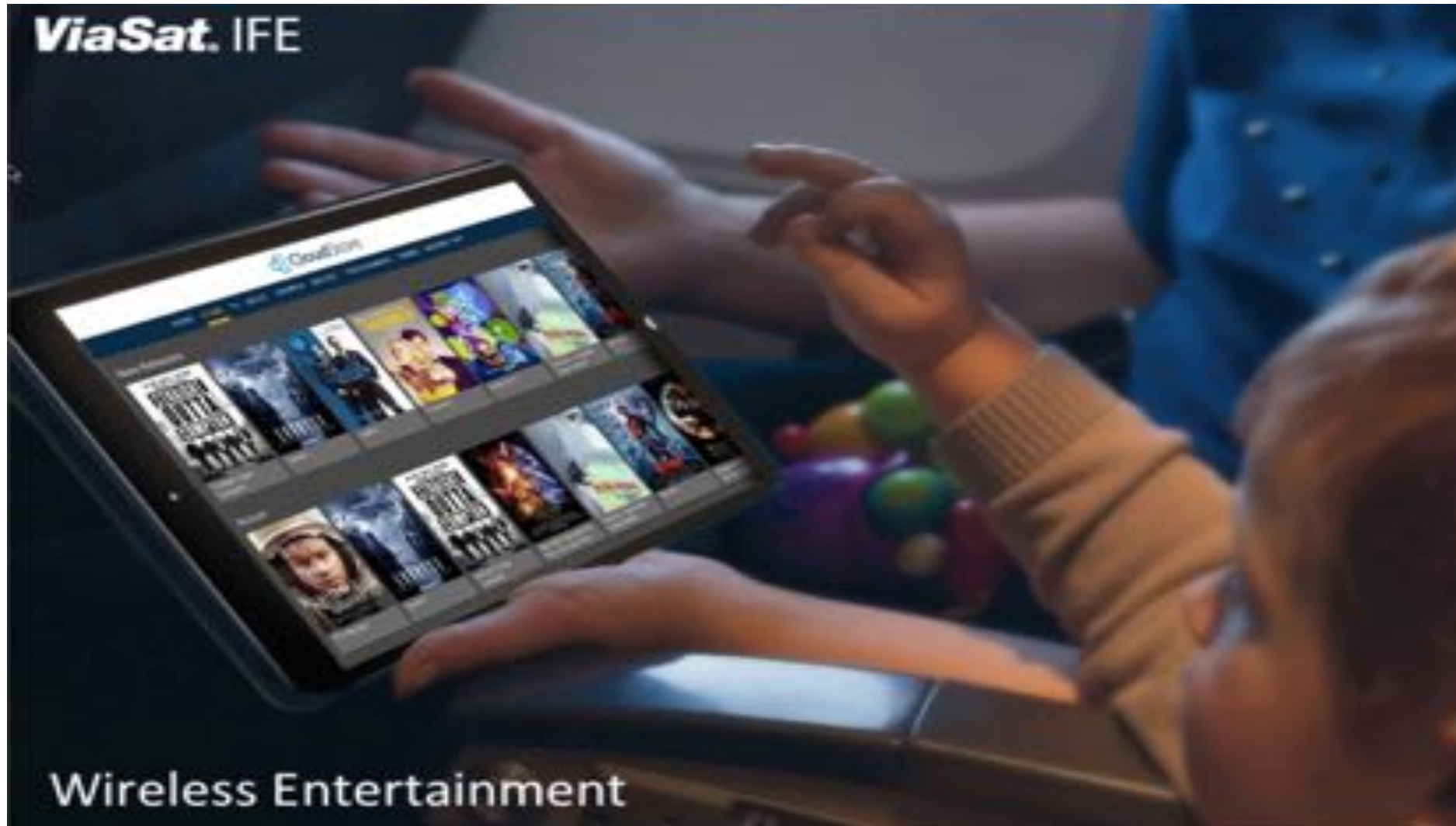


Viasat In-Flight Connectivity



Airlines Value Happy Passengers



Main User Requirements

User experience

- The system has to provide an overall connectivity experience comparable with home experience
- The system has to provide a good experience for HD video streaming
- The system has to provide a good experience for real time 2-way video and audio (VoIP) applications
- The connectivity has to be free or very low-cost (few USD or EUR)

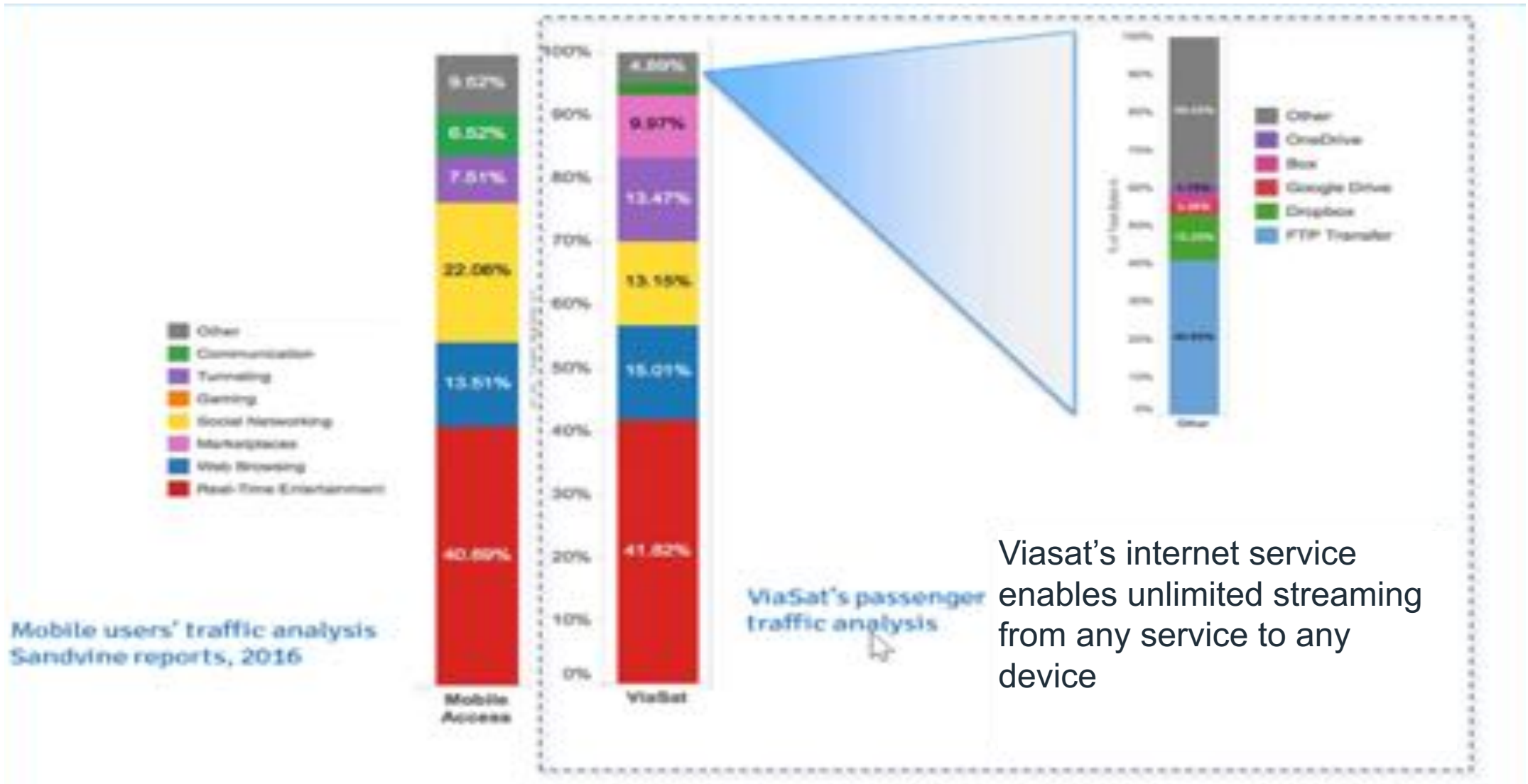
Functionalities

- The system has to allow connectivity from gate to gate

Availability

- The system has to be available in as many types of aircrafts for regional (small and medium aircrafts) as well as continental and intercontinental flights

What Passengers want

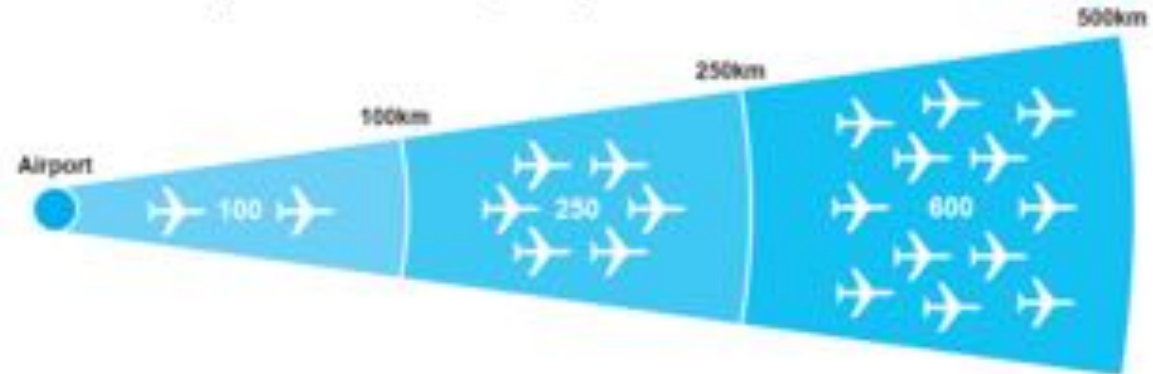


In-Flight Wi-Fi Bandwidth Demand

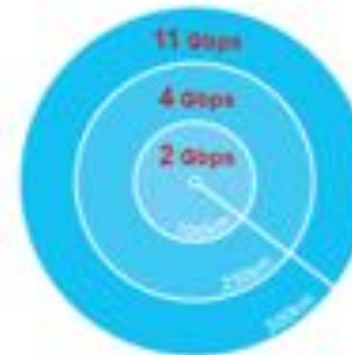
- Aircrafts: 589 in service / 980+ under contract to be installed



Peak of Representative Top Airports



Chicago ORD



Atlanta ATL



Paris CDG

(Estimated Peak Demand)

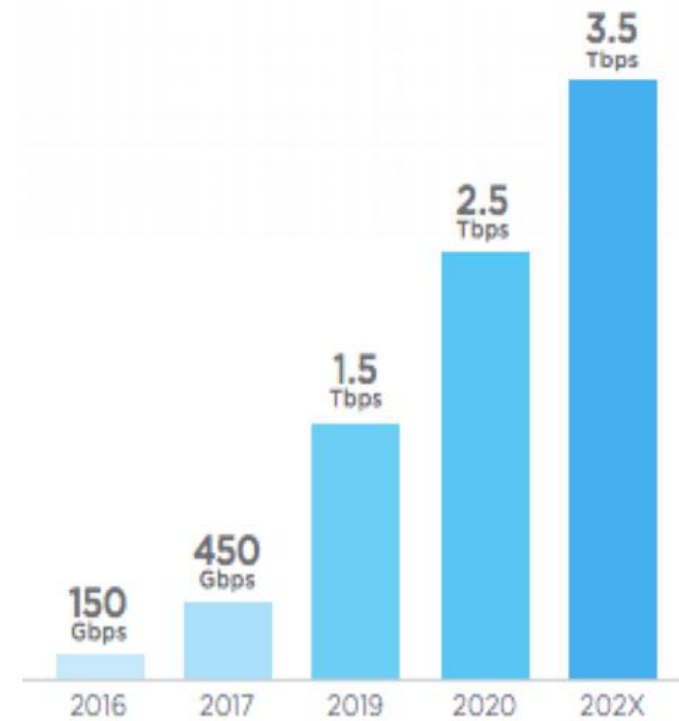
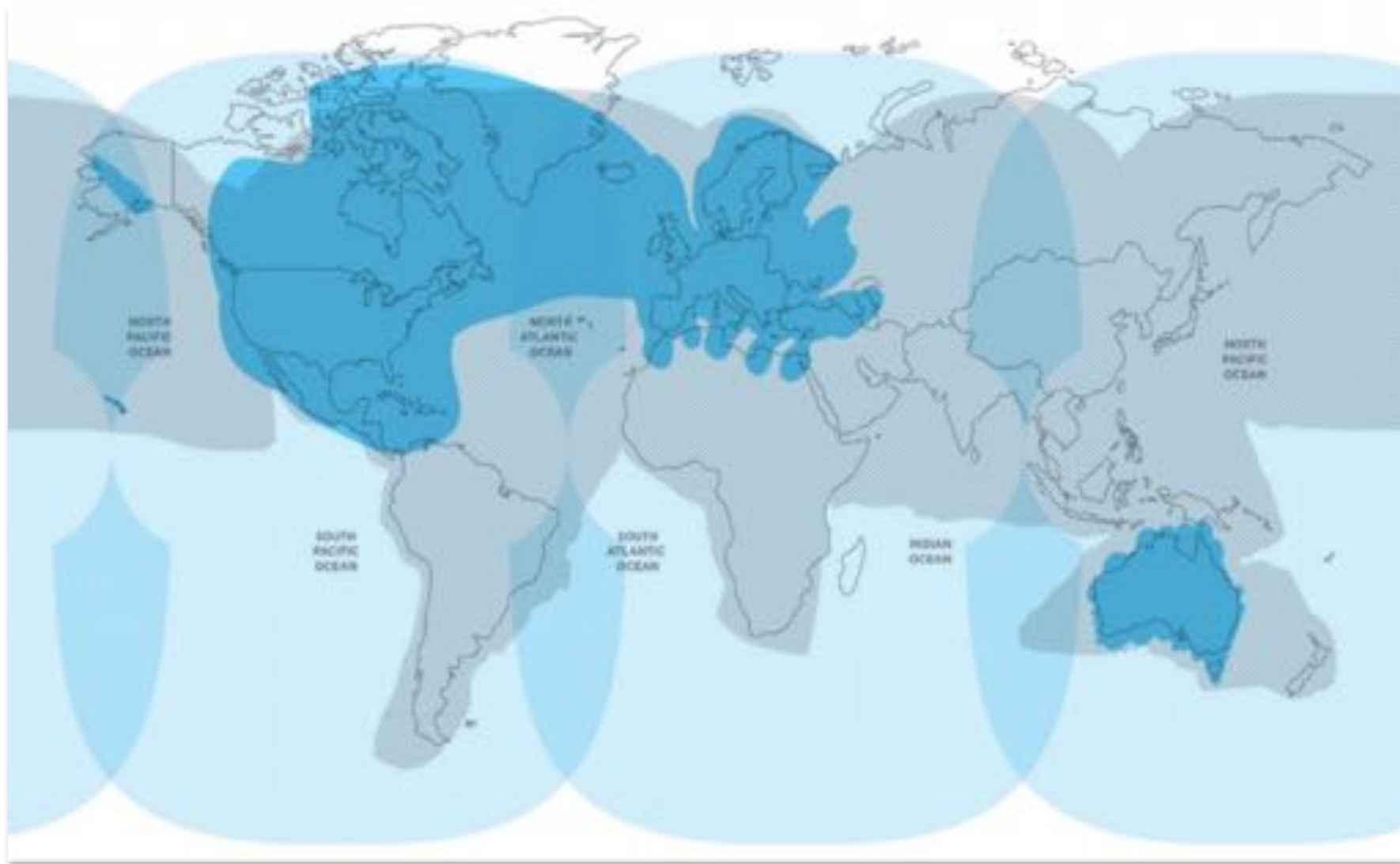
Viasat – In Flight Connectivity as at home



- > 12 Mbps average per passenger
- > More than 1 passenger over 2 is connected (>50% take up rate)
- > 4M+ PED (users) sessions in last quarter
- > 589 aircrafts in service. Additional 980+ under installation
- > Scaling airborne terminal production to ramp with multiple airlines



Global Inflight Connectivity – Global ISP



Coverage*

- Current and ViaSat-2 Ka-band coverage
- Current and planned ViaSat Ku-band coverage
- ViaSat-3 Ka-band coverage

*Coverage is approximate and subject to change; performance varies based on location and selected service plan.

Connected Aircraft – Opportunities and Challenges

Broadband internet creates strategic opportunities (and new challenges) in every part of the airline.

Ancillary Revenue

- New onboard revenue streams
- Pref-light and post-flight sales
- New partnership opportunities
- Spend loyalty points onboard

Marketing

- Better customer proposition
- Enhanced loyalty
- New customer insight
- Drive mobile app adoption

Engineering

- Real-time monitoring and OOOI
- Predictive maintenance
- Live fault reporting
- Faster repairs and turnarounds
- Supporting mixed fleets and hardware

Finance

- Real-time business intelligence
- Complex business cases
- Long-term commitments

IT

- Data management challenges
- Enterprise architecture
- Manging connected + disconnected aircraft

Flight Operations

- Live messaging and OOOI
- Electronic flight data distribution
- Dynamic route planning
- Fuel savings

Cabin Services

- Enhanced inflight services
- Identify and server VIPs better
- Live Passenger recovery
- Crew reporting
- Enhanced passenger expectations

Safety + Compliance

- Live track and trace of all aircraft
- Safer pilot decision-making
- Live compliance management
- End-to-end auditability

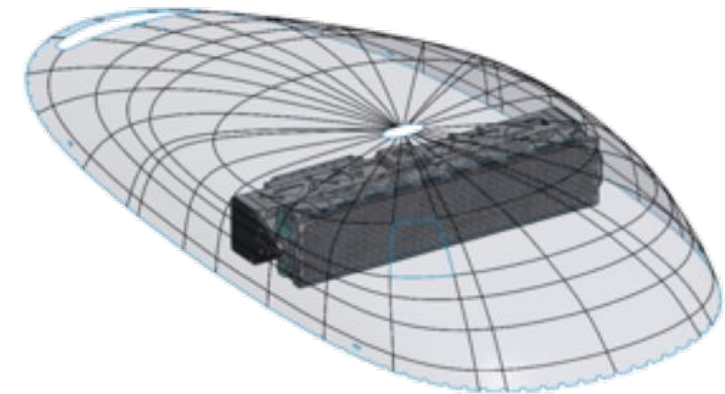
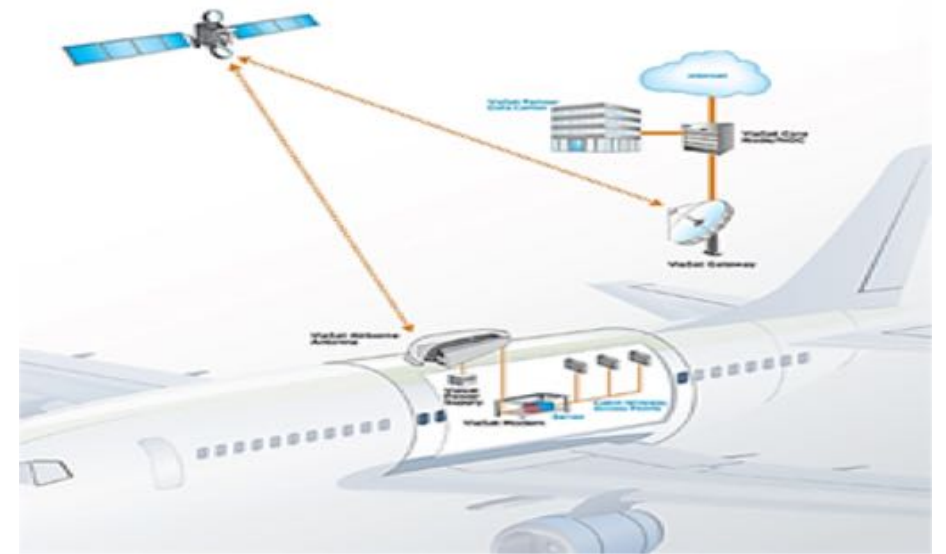


Viasat Connected Aircraft Platform



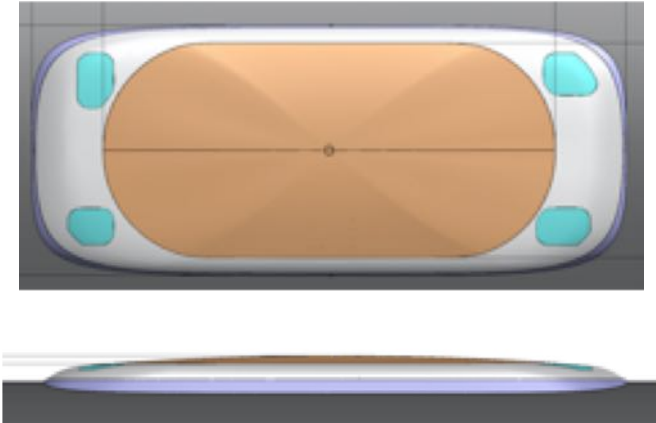
In Flight Connectivity system

- > Broadband connectivity to all passengers on regional and inter-continental flights
- > Very low connectivity cost allows airlines to offer free network access
- > Low-profile antenna design minimize impact on aircraft



Future Terminals

- Ongoing development of Flat Panel terminals to address also smaller aircrafts
- Developed in the frame of Project Aidan
 - PPP with ESA currently supported by Switzerland, Netherlands, Romania and Ireland





Viasat 
5G 