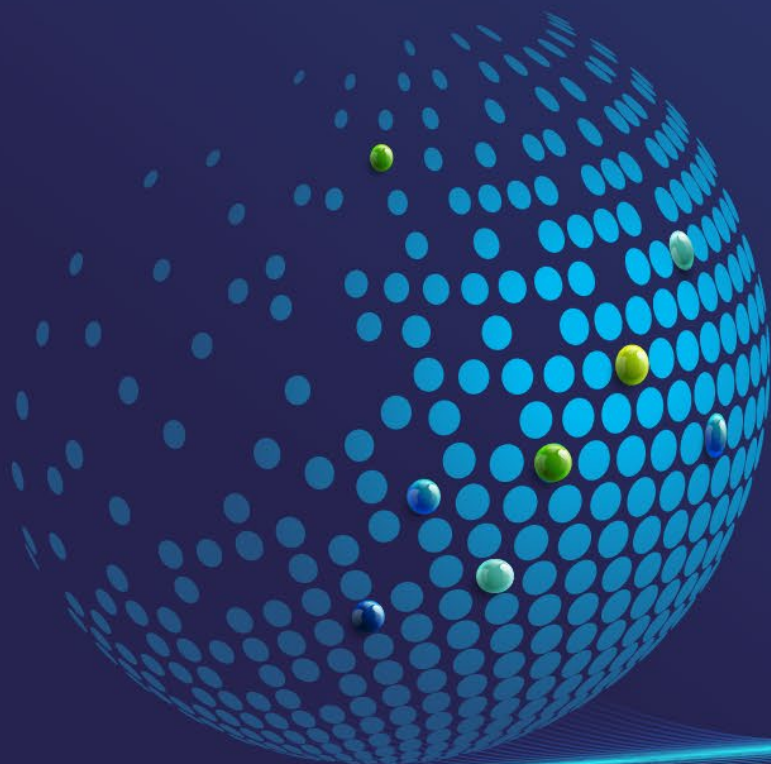


Future Communication Infrastructure

Peter Leydold - FREQUENTIS



FREQUENTIS
FOR A SAFER WORLD

Honeywell

AIRTEL ATM
The Data Link Company

LEONARDO

AIRBUS

ENAIRE

≡

inmarsat

ThalesAlenia Space
a Thales / Leonardo company

indra

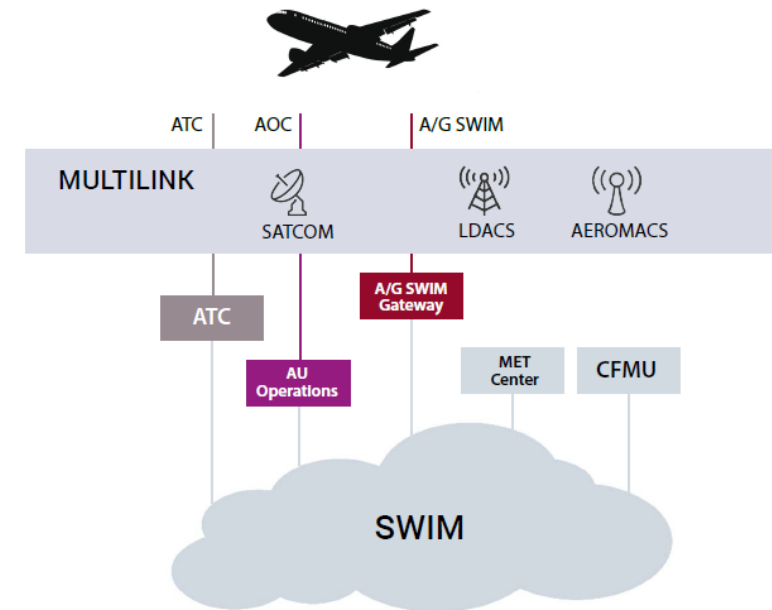
EUROCONTROL

SESAR 2020 SHOWCASE

Future Communication Infrastructure

Enabling safe and reliable broadband data communication services

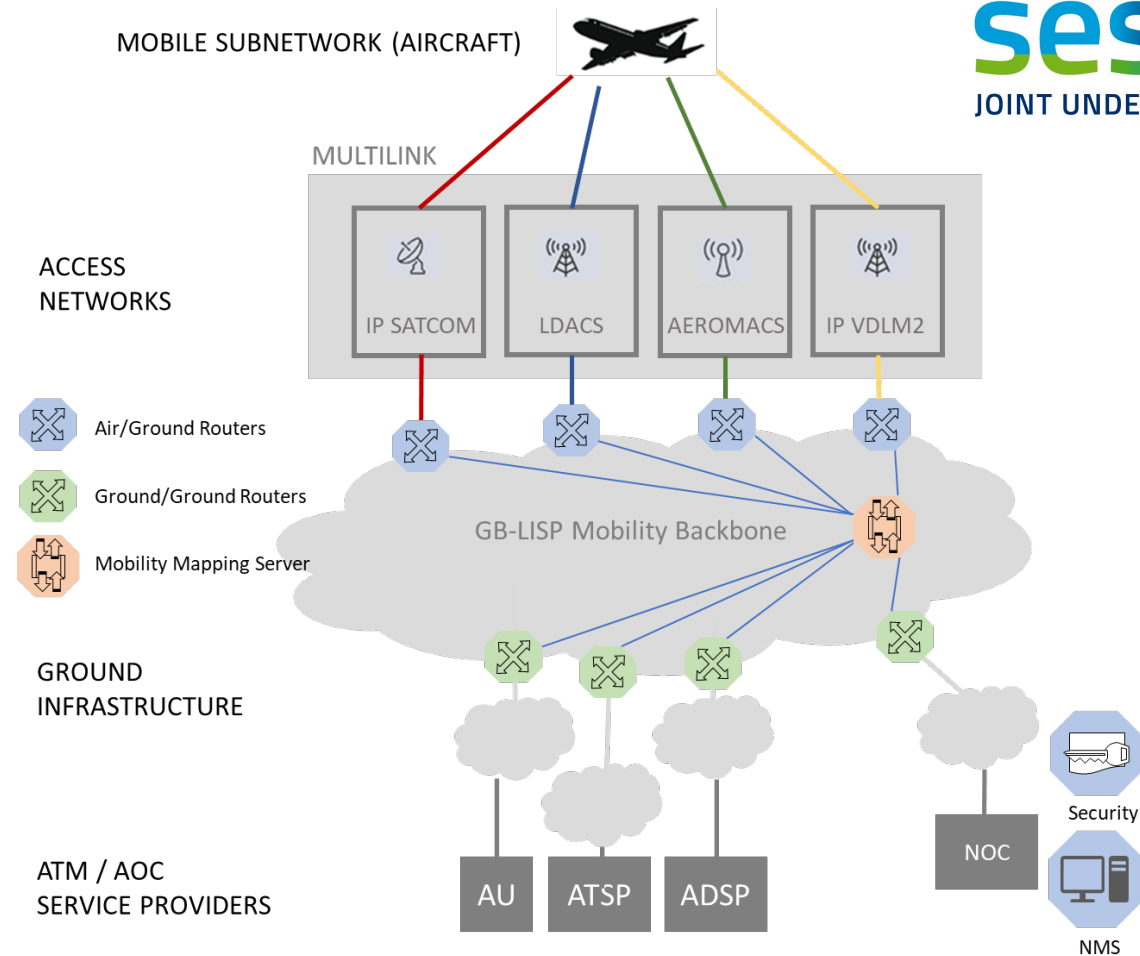
Single pilot operation | Trajectory-based operations |
CO₂ and noise reduction | Automation | Telemetry data
Open framework | Security



Improved capacity, efficiency, performance, safety and resilience of the current CNS infrastructure

Overview

- New IP-based infrastructure for Communications between Ground systems and Aircraft
- Functions of FCI
 - Mobility (GB-LISP)
 - Multilink
 - Security
 - Network Management
 - Interoperability Gateways (legacy OSI)



FCI - a key enabler for the vision of Digital European Sky.

Next steps



- ESA IRIS Phase 3 – Global Solution (2022 – 2025)
 - Matures FCI to a deployable solution in the context of SATCOM
 - Flight Tests with SATCOM
 - Provision of the Mobility & Multilink functionality
- SESAR 3 Industrial Research (2023 – 2026)
 - Additional network features of the ICAO ATN IPS Manual
- SESAR 3 / DSD to reach Level 8 maturity (2024 – 2027)
 - Making FCI Ground Infrastructure ready for Deployment
 - Flight Tests with ATN-OSI dual link & link transition to IPS
- Future
 - DSD with complete IPS multilink supporting LDACS & Hyperconnected ATM
 - Project for Deployment

