



**NASA Advanced  
CNS Architectures and  
System Technologies  
(ACAST) Workshop**

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**SITA CNS and IP-Based  
Solutions**

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# SITA CNS Solutions

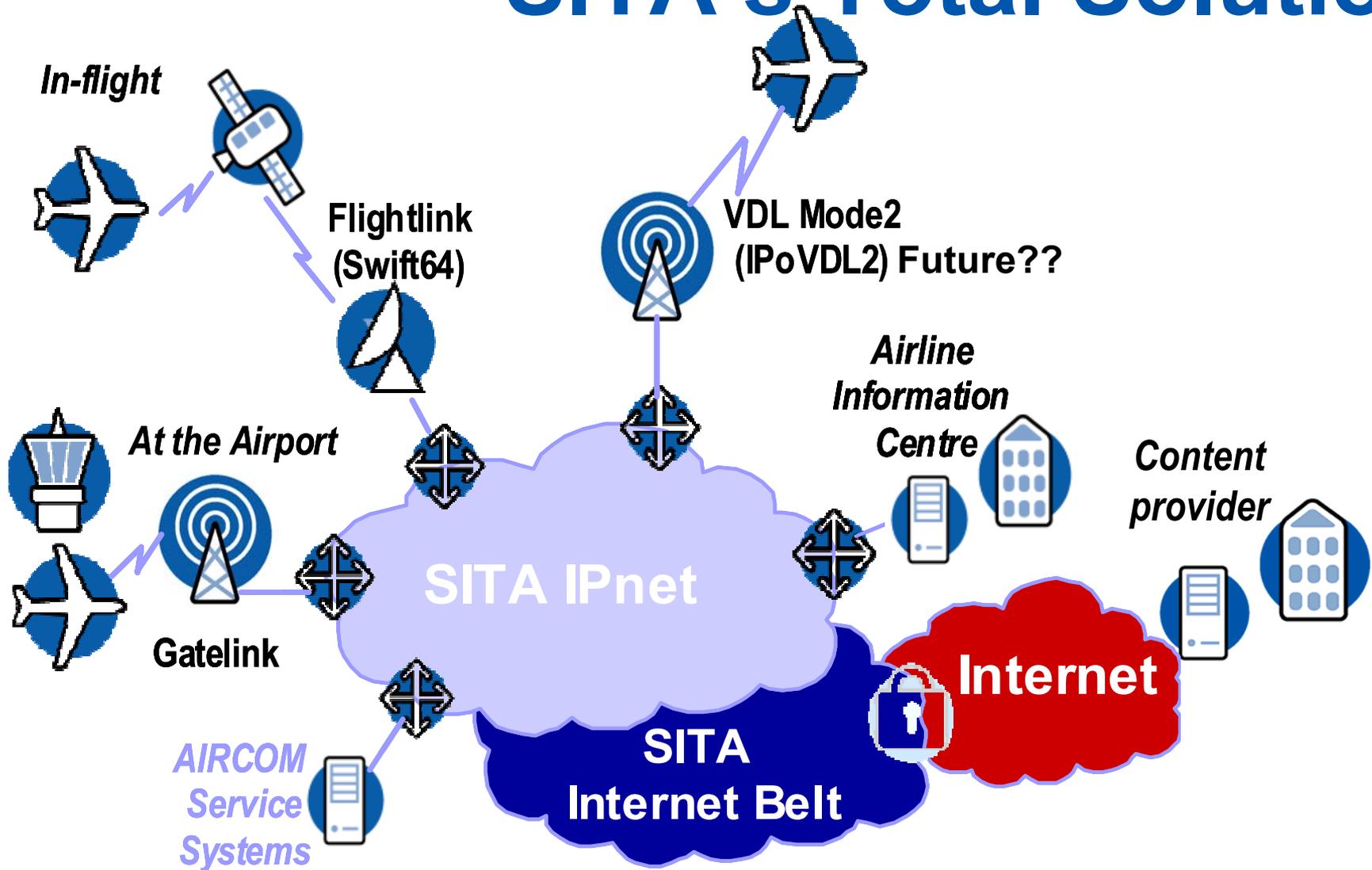
- **Datalink Service Providers such as SITA and ARINC provide networks supporting ATS applications such as:**
  - ACARS-based FANS-1/A, ATIS, Oceanic Clearance, Departure Clearance
  - ATN-based CPDLC
- **These networks are being used operationally worldwide and are expected to remain in use for several years into the future and provide:**
  - VHF ACARS
  - VHF Digital Link (VDL) Mode 2
    - Space-constrained short haul aircraft not equipped with SATCOM can benefit from use of VDL Mode 2 for multiple applications such as AOC applications, EFB, and CPDLC
  - Aeronautical Mobile Satellite Services

# IP-Based Solutions

- **Swift64 (nominally 64 kbps)**
- **SwiftBroadband (formerly called AeroBGAN in the future) (nominally 432 kbps)**
- **IP Over VDL Mode 2 (nominally 31.5 kbps)**
  - **SITA has demonstrated in lab environment.**
  - **Working within the Airlines Electronic Engineering Committee (AEEC) to seek standardization.**
- **These can potentially be used to support Electronic Flight Bag, video conferencing, among other applications.**

# Aeronautical IP Communications

## SITA's Total Solution



# Conclusion

- **Networks supporting CNS are operational today.**
- **IP-based solutions are being developed and can be evaluated for suitability for CNS use.**



**SITA**

**Thank you for  
your attention**

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