



New CNS/ATM Technologies and Safety

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FAA

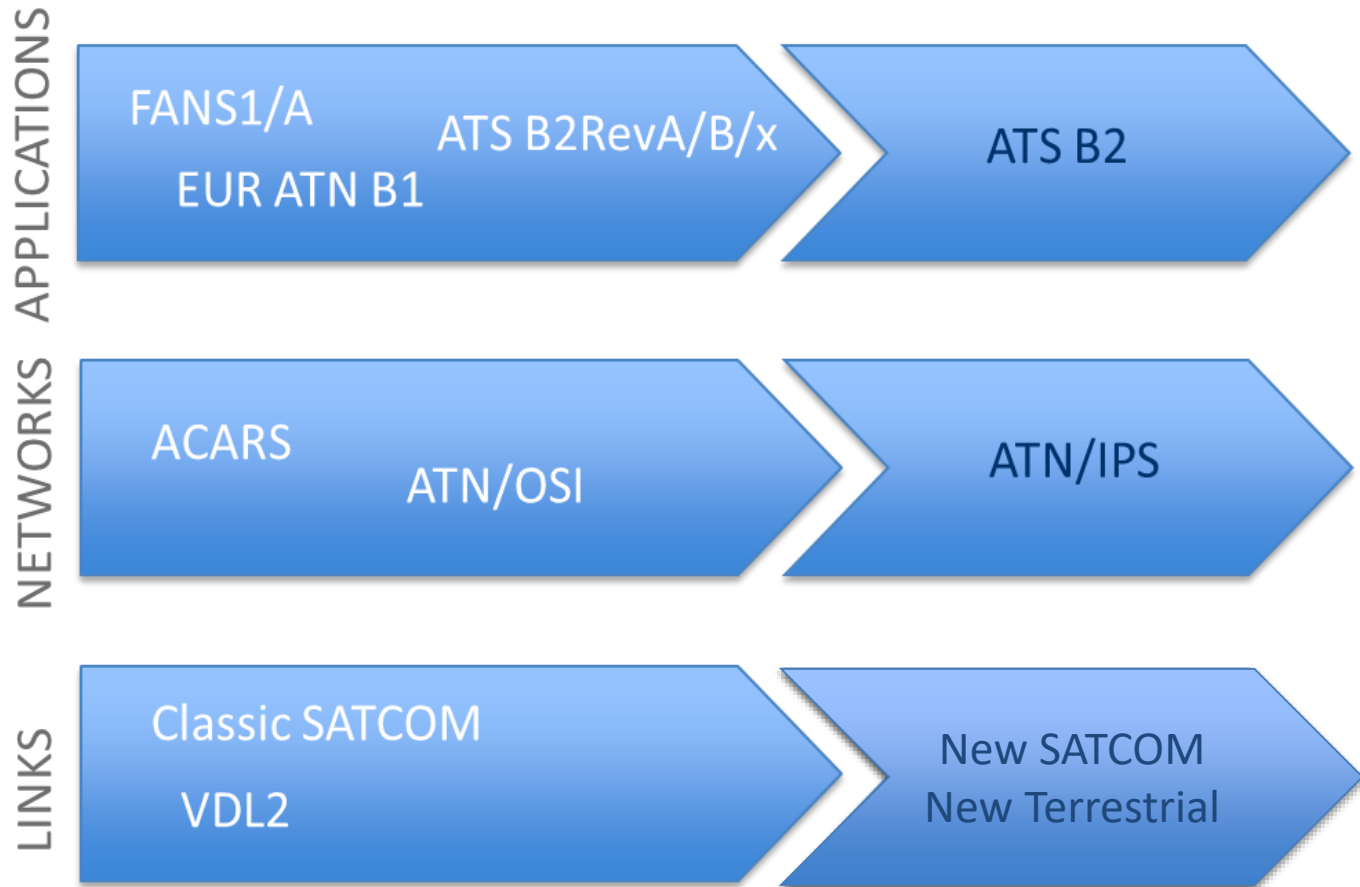
Harmonization

- **Datacomm**
- **Global SWIM**
- **Navigation**

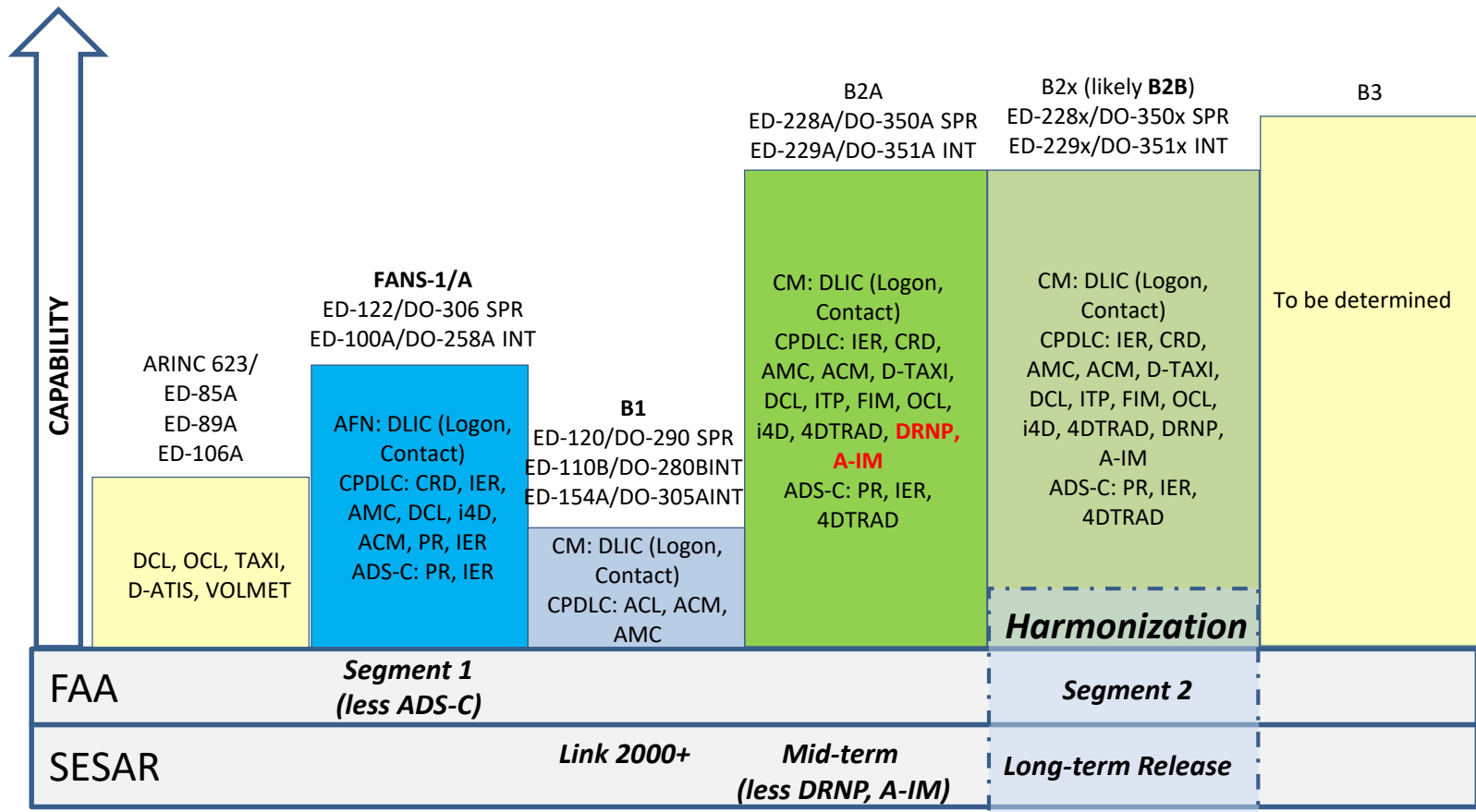
Datacomm

- **Main focus areas**
 - ✦ **Applications – FANS, ATN**
 - ✦ **Networks – ACARS, OSI, IPS**
 - ✦ **Physical Links – VDLM2, SATCOM,**
 - ✦ **Security**

Datacomm evolution

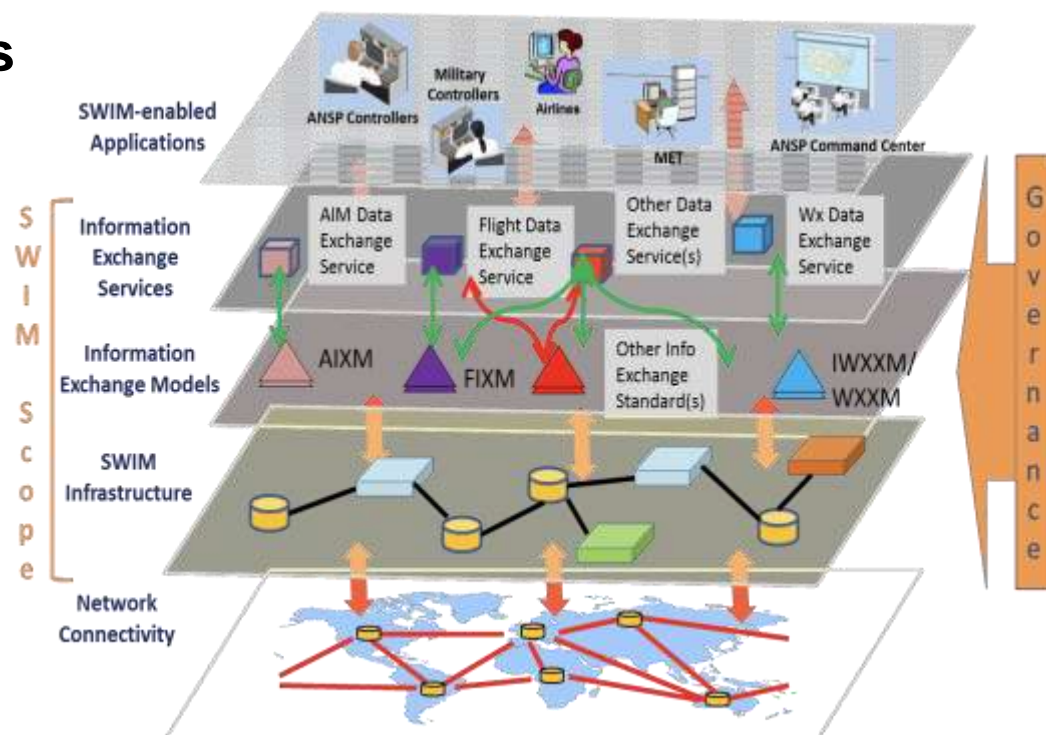


Future Harmonization

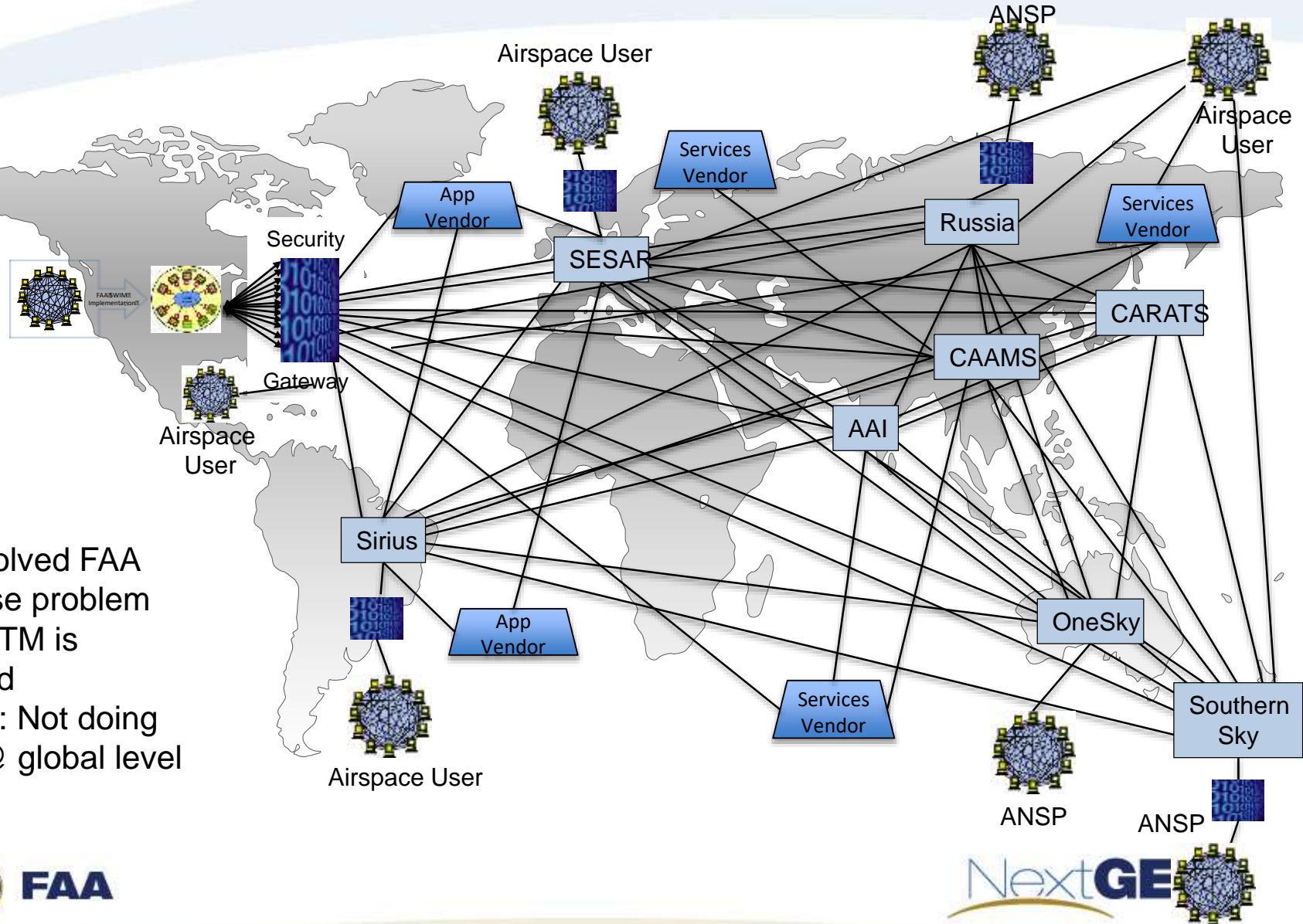


SWIM

- ✦ International Challenges
- ✦ Regional Solutions
- ✦ Global SWIM Providers
- ✦ Security

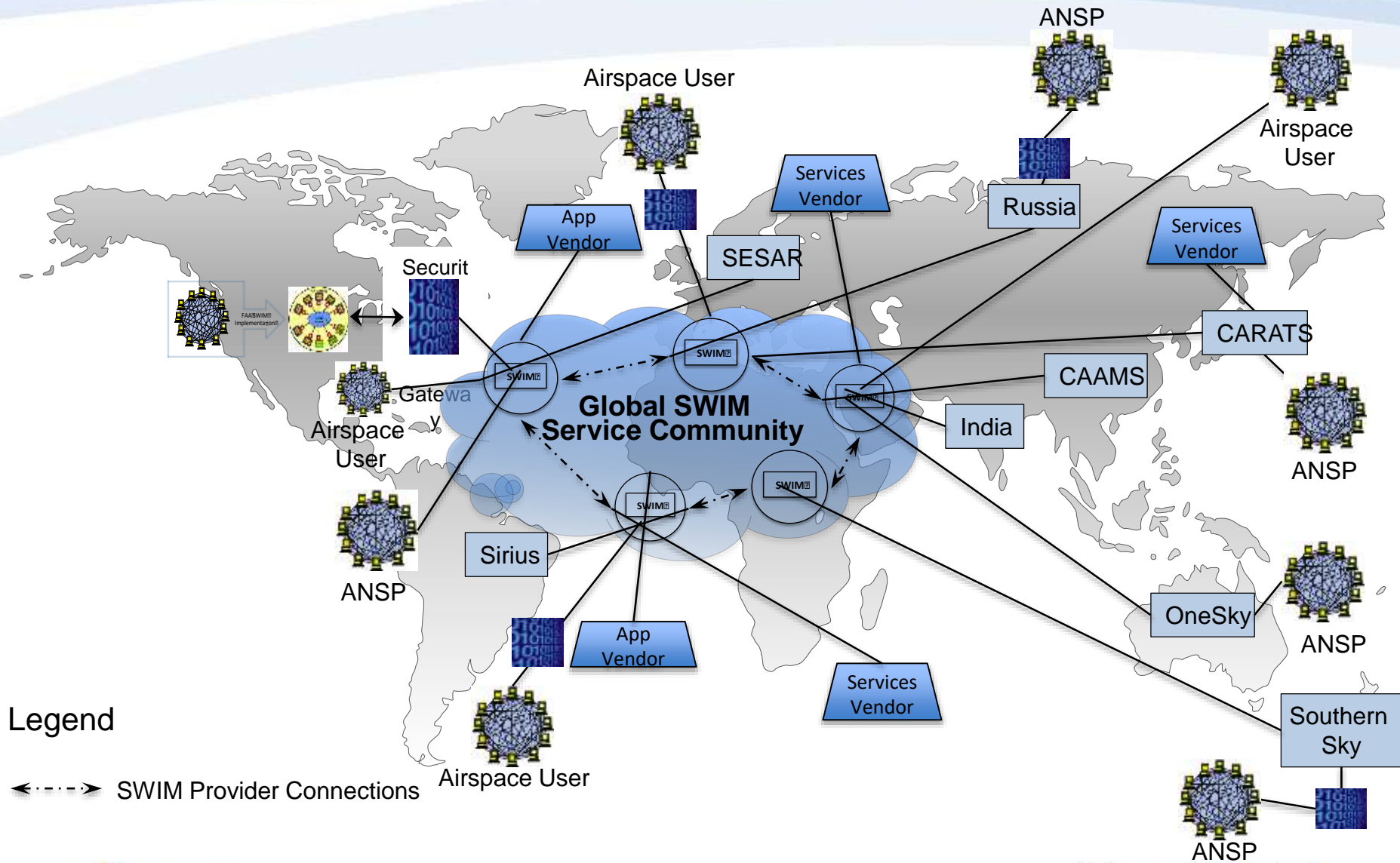


Federated Global ATM Environment

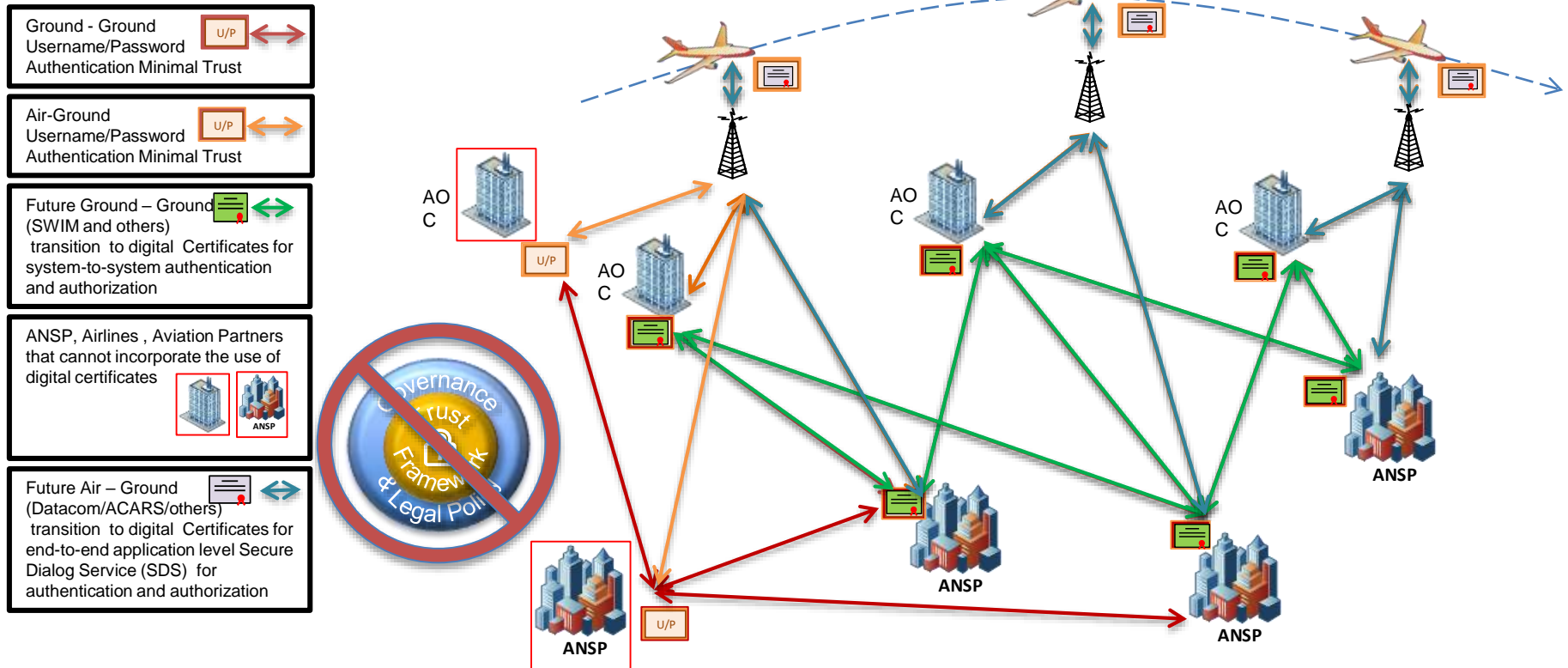


SWIM solved FAA
enterprise problem
Global ATM is
federated
Problem: Not doing
SWIM @ global level

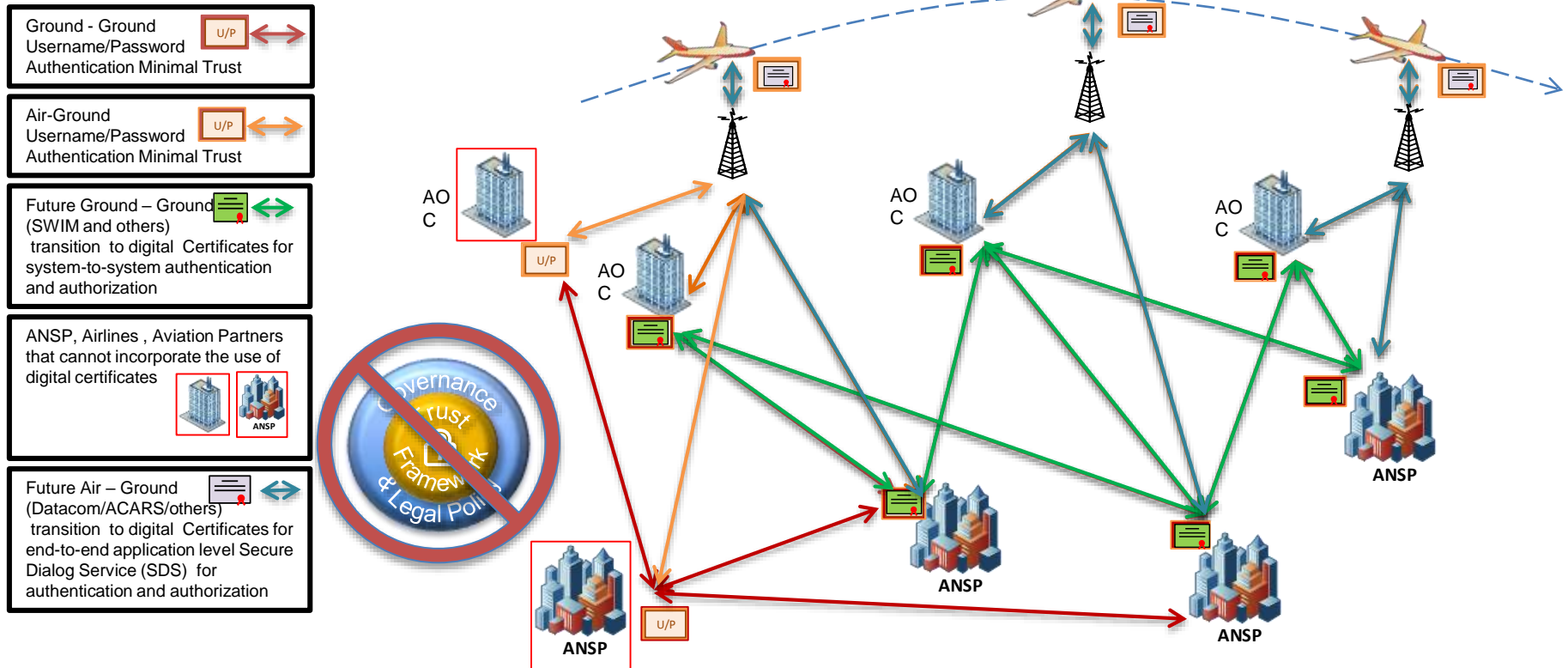
SWIM Global Strategy for Aviation Partners



Current methods of Securing Information and Data Exchange



Current methods of Securing Information and Data Exchange



Navigation

- Mostly harmonized on Ground and Satellite based navigation implementations
 - ✦ VOR/DME, GNSS, Augmentation
- Performance Based Navigation
 - ✦ Shifting from ground based to Satellite based navigation
- Efficient Utilization of Spectrum
 - ✦ Freeing up ground based navigation spectrum and substituting with more efficient solutions