



IETF 103 Hot RFC

Internet use by Aviation Routing Storm Risks ?

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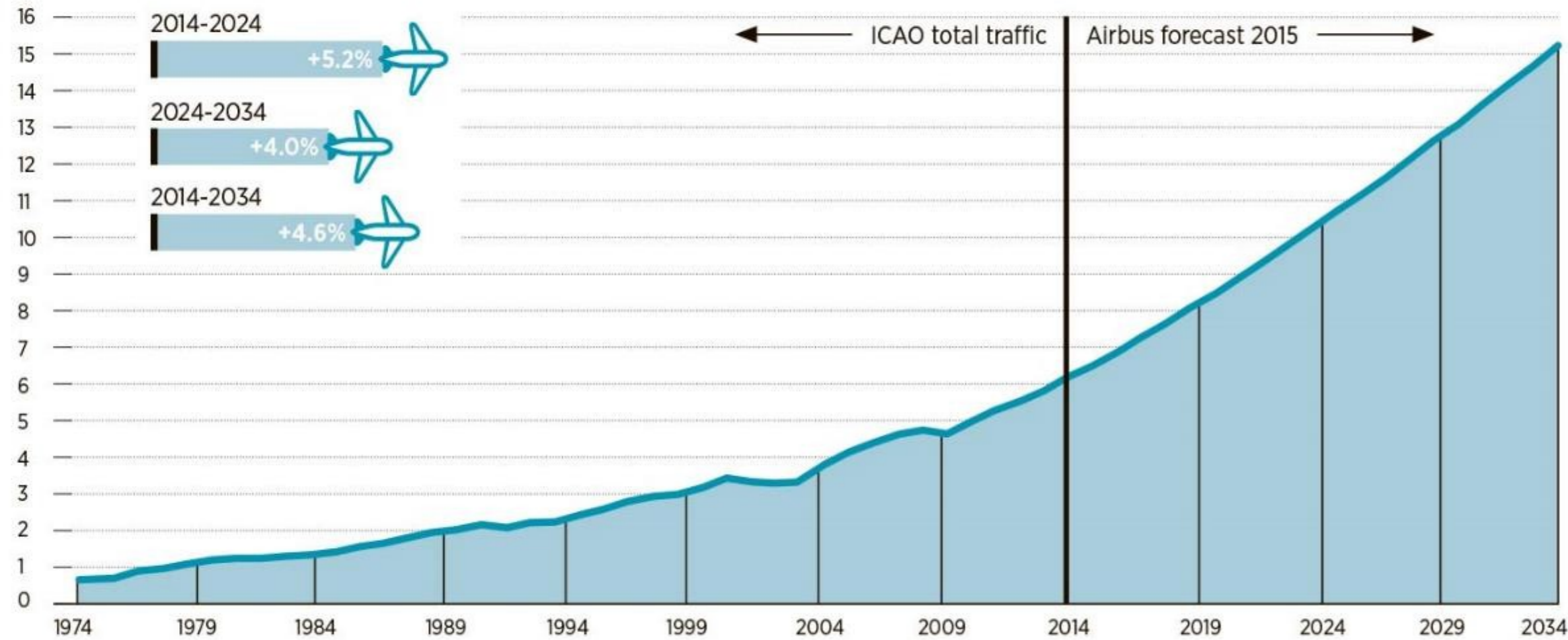


A NEW ERA IN AVIATION

- Demand, including new entrants

GLOBAL AIR TRAFFIC (TRILLION REVENUE PASSENGER KILOMETRES)

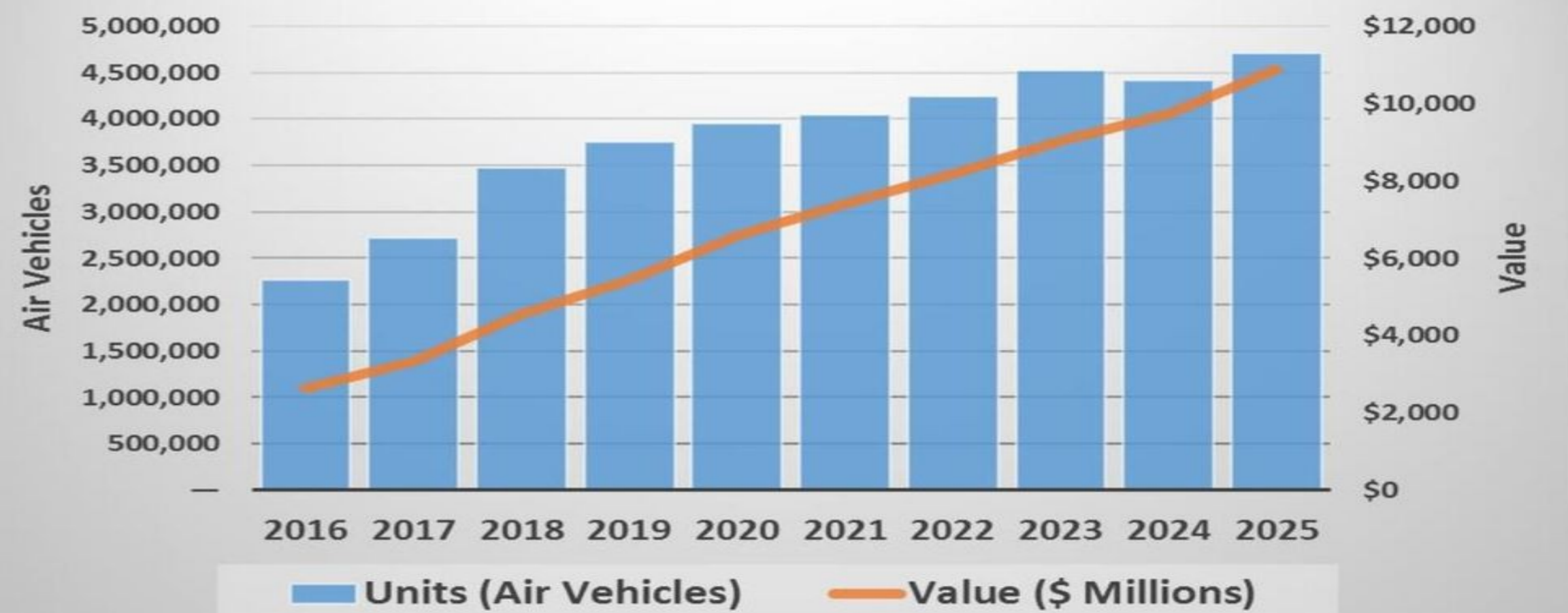
Traffic is expected to double in the next 15 years



Source: International Civil Aviation Organization (ICAO)/Airbus 2015



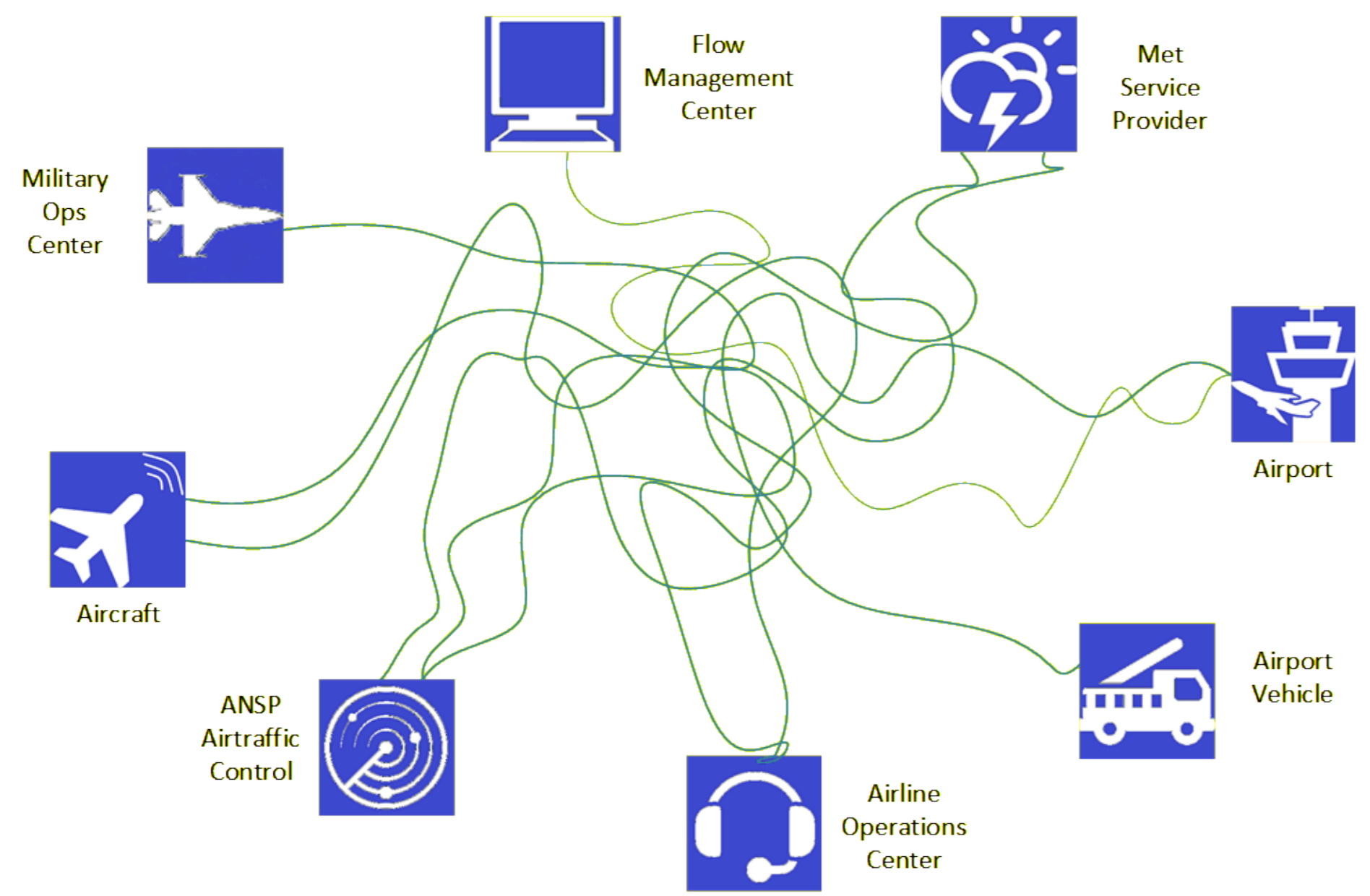
World Civil UAS Production Forecast





Problem Statement (for aviation)

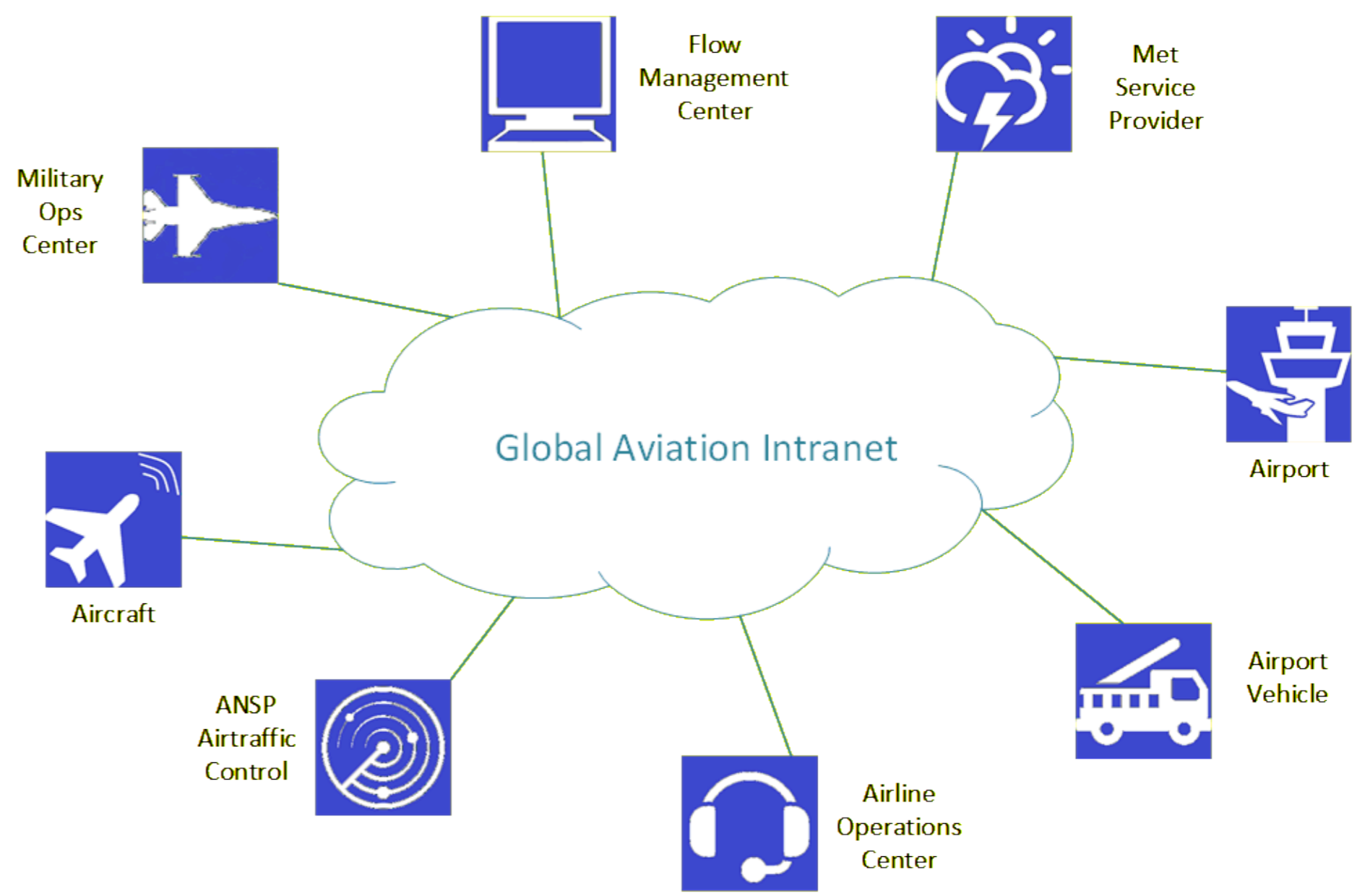
AVIATION TODAY



- Specific systems and networks
- Point to point communication
- Physical infrastructure
- Low connectivity
- Limited Automation with user oversight

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Low exposure
Limited impact

FUTURE OF AVIATION



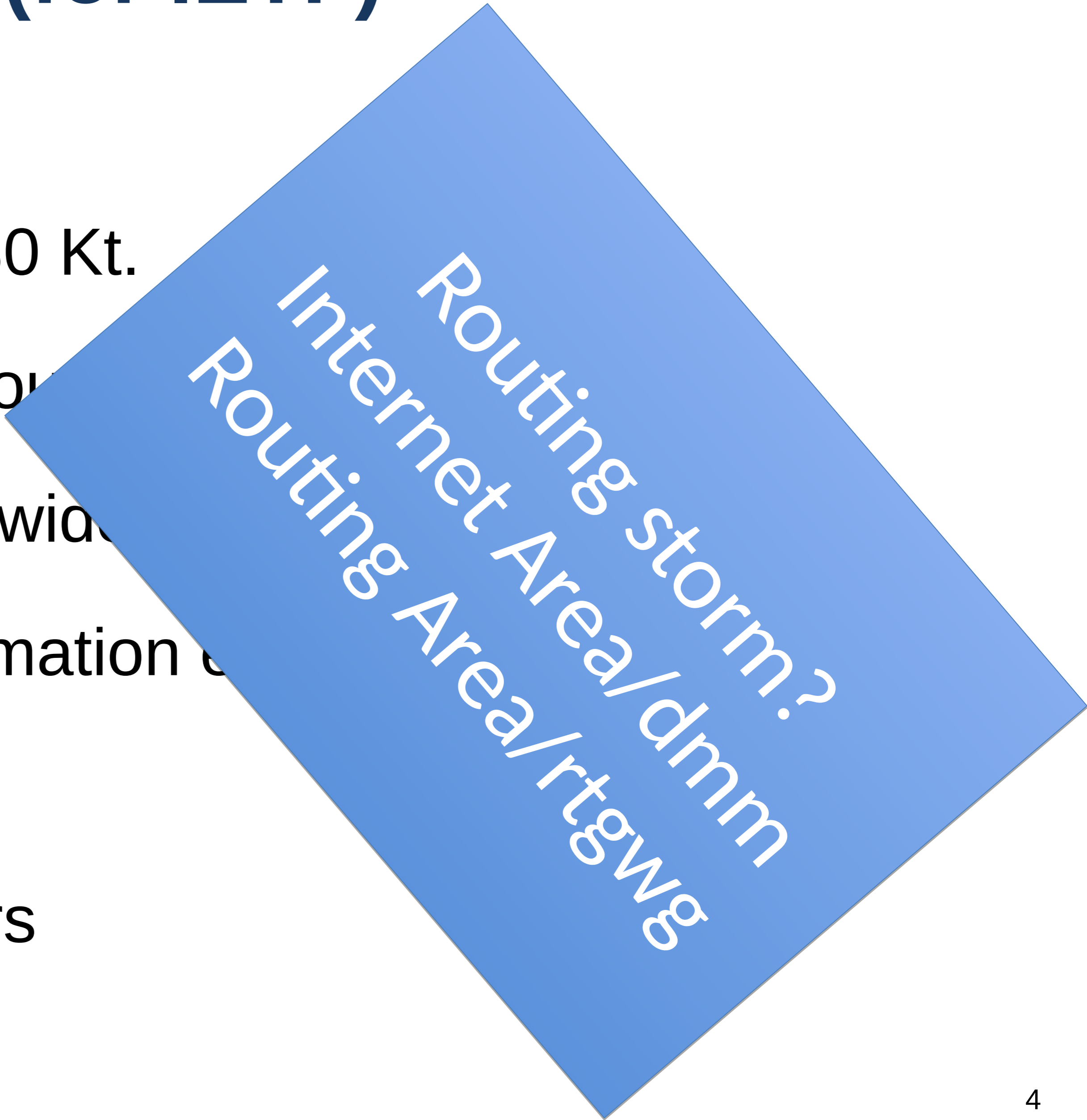
- Multi-stakeholder system of systems
- Public networks
- Increased use of COTS and standard protocols
- Virtual infrastructure
- High connectivity
- Increased Automation with minimum user oversight

=
High exposure
High impact



Problem (?) (for IETF)

- Commercial aircraft avg speed: 480 Kt.
- Only in US: 5000 flights simultaneously
- Around 100000 flights a day worldwide
- No recognition of borders for information
- Average flight distance: 1200 NM.
- Longest flight: 9500 NM – 19 Hours



Thank you

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