



ATIS' UAS Program

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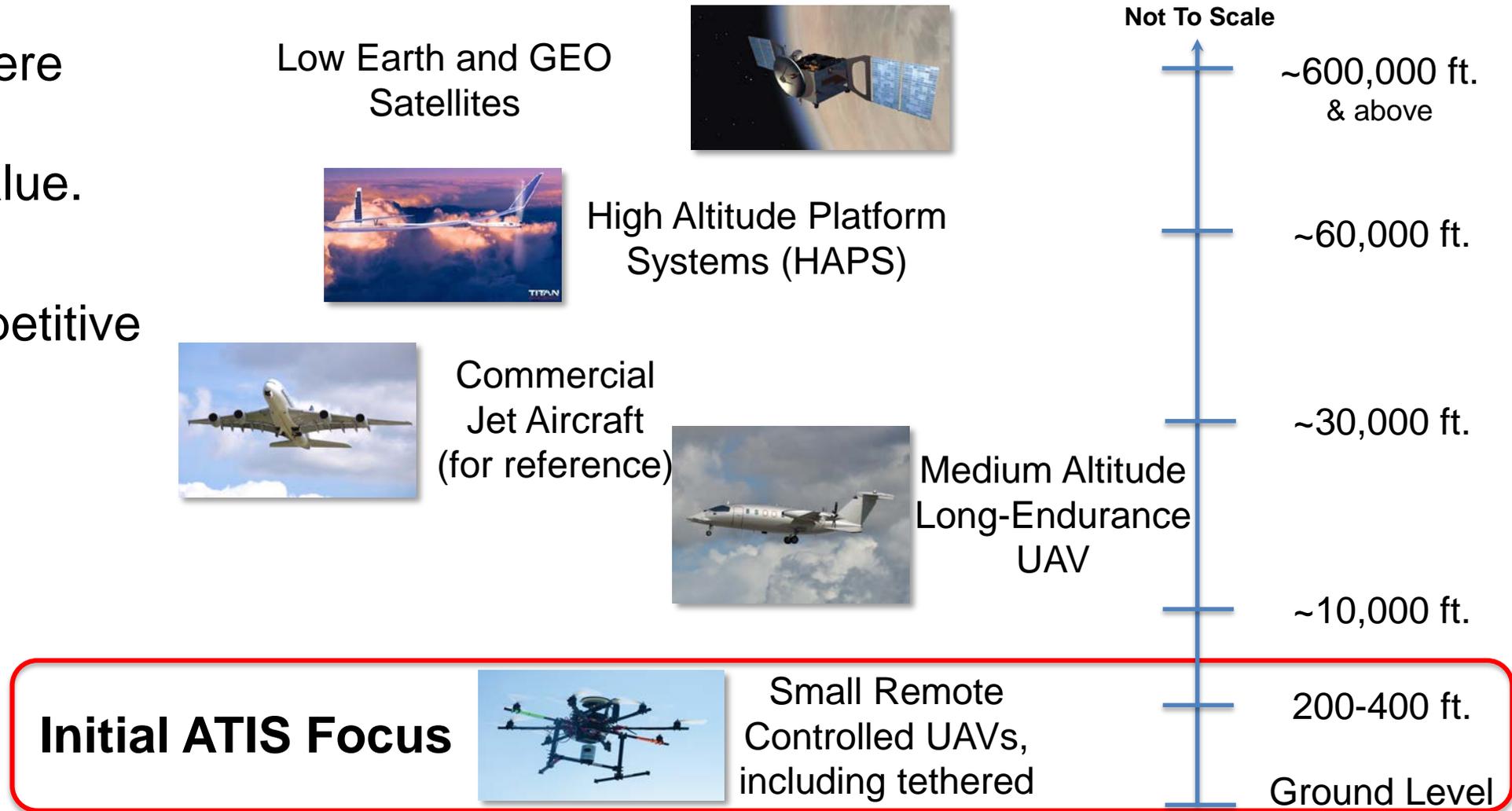
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Advancing the Information and Communications Industry Transformation

In a rapidly changing industry, innovation needs a home. ATIS is a forum where technology companies convene to find solutions to their most pressing shared challenges.

Unmanned Aerial Vehicle (UAV) Scope

- Identify areas where common industry positions bring value.
- Avoid areas with potential for competitive differentiation.
- Focus:
 - Requirements
 - Services



ATIS UAV Focus

Command and Control

- Remote Control
 - Beyond line of sight
- Regulatory Compliance
 - Identification
 - Location service
 - Flight planning & collision avoidance
 - Airspace enforcement
- Formation flying
- Status monitoring



Payload

- Video (HD, 3D)
- Environmental information/surveys
- Control of actuators
- UAV-delivered communications services
 - Backhaul
 - Peer-to-peer

Example Requirements

Cellular support for UAV control

- Reliable transmission
- Low latency
- Capacity for all UAVs
- Coverage/range
- Resistance to interference
- Fail-safe operation

Location Services

- Location accuracy (3 axis)
- Location update rates
- Real-time navigation and reporting
- Coverage in critical areas
- Performance across a range of environments
- Reliability and availability of signal
- Redundancy
- Cost and mass market availability

Summary

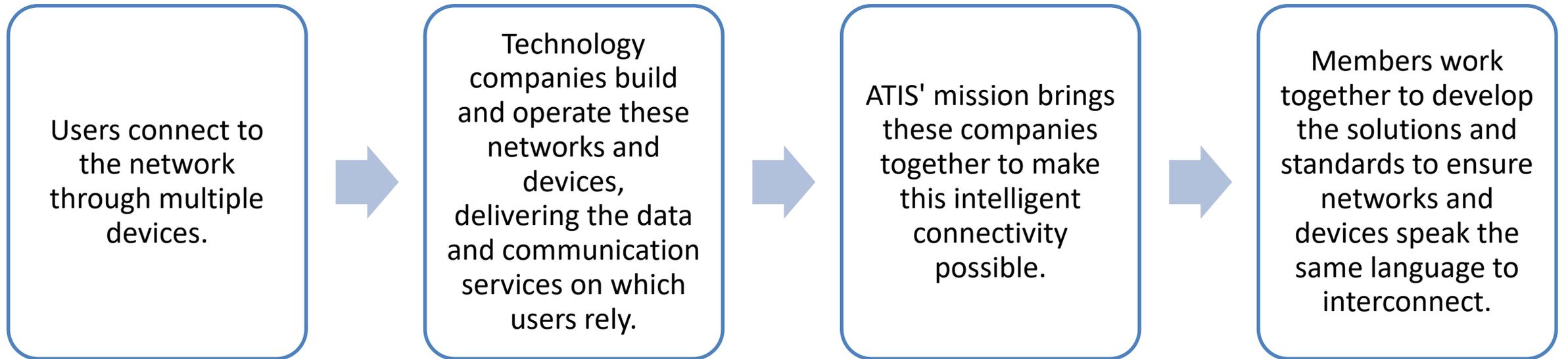
- UAV effort is part of ATIS focus on ICT transformation over next five years.
- Initial focus on small UAVs below 400 feet:
 - Including beyond-line-of-sight and controlled airspace
 - Initial report to be published in 3Q 2017
- Strong participation by service providers and vendors:



Backup

ATIS' Industry Leadership

- ATIS has a vital role in digital society's connected communications:



ATIS Members Represent the Entire ICT Ecosystem

