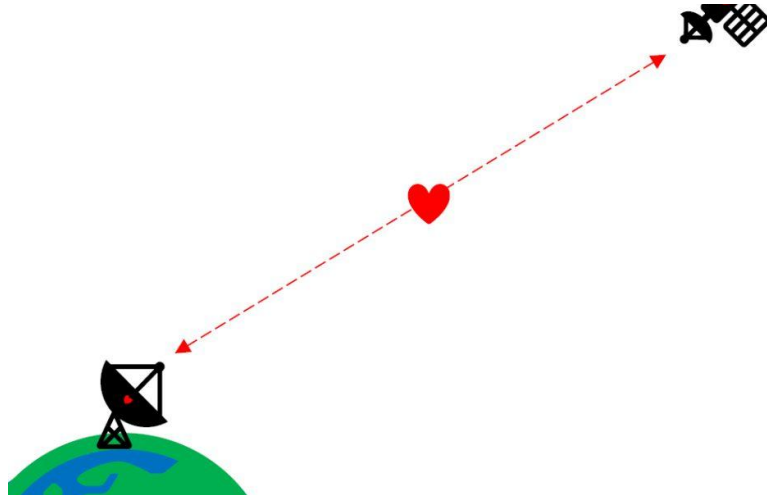
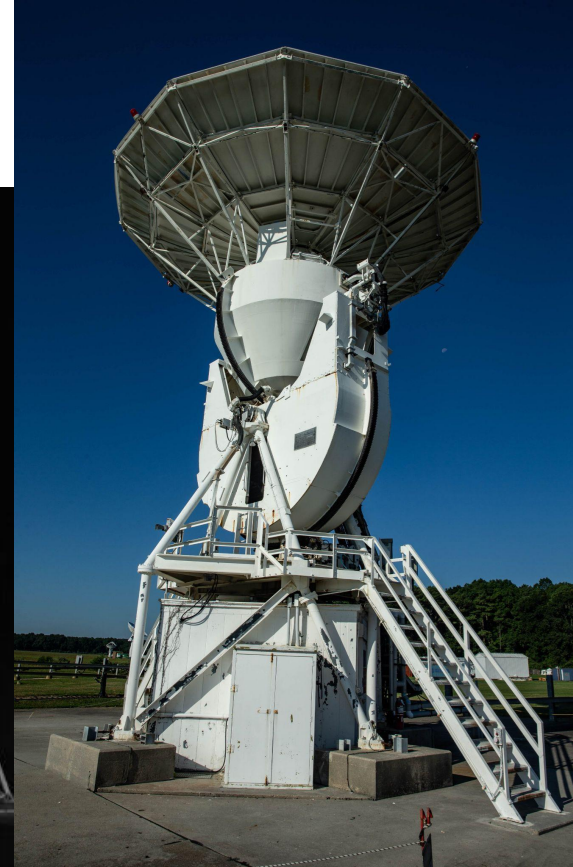
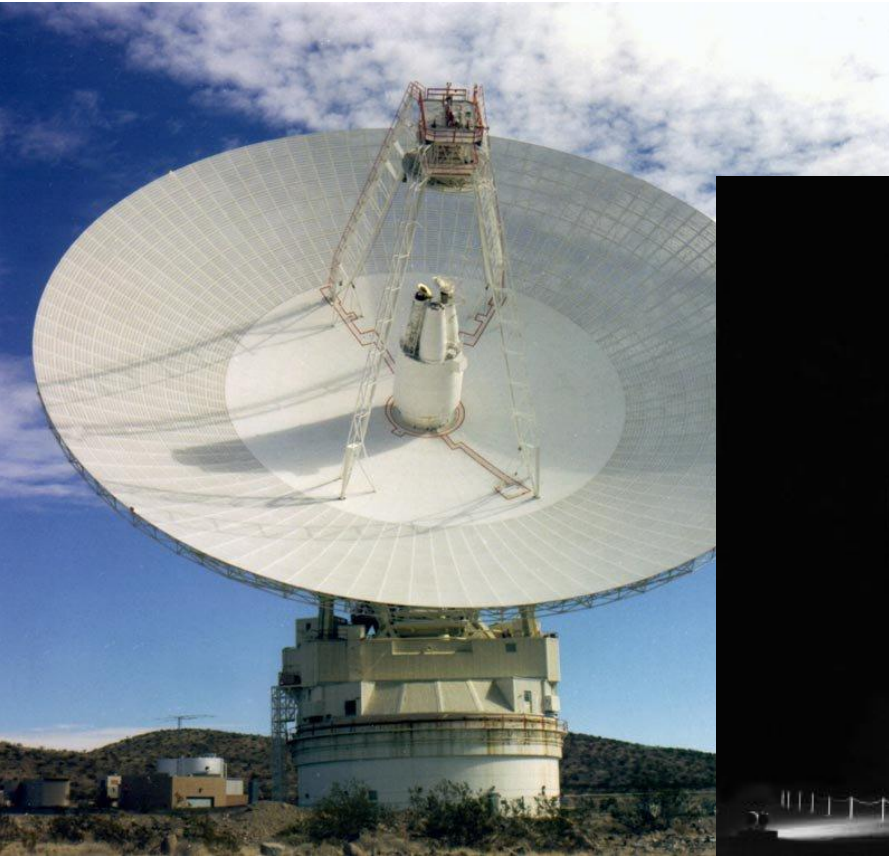


Introduction to Space Communication Services

Katherine Monson, (former CEO of KSAT Inc.)



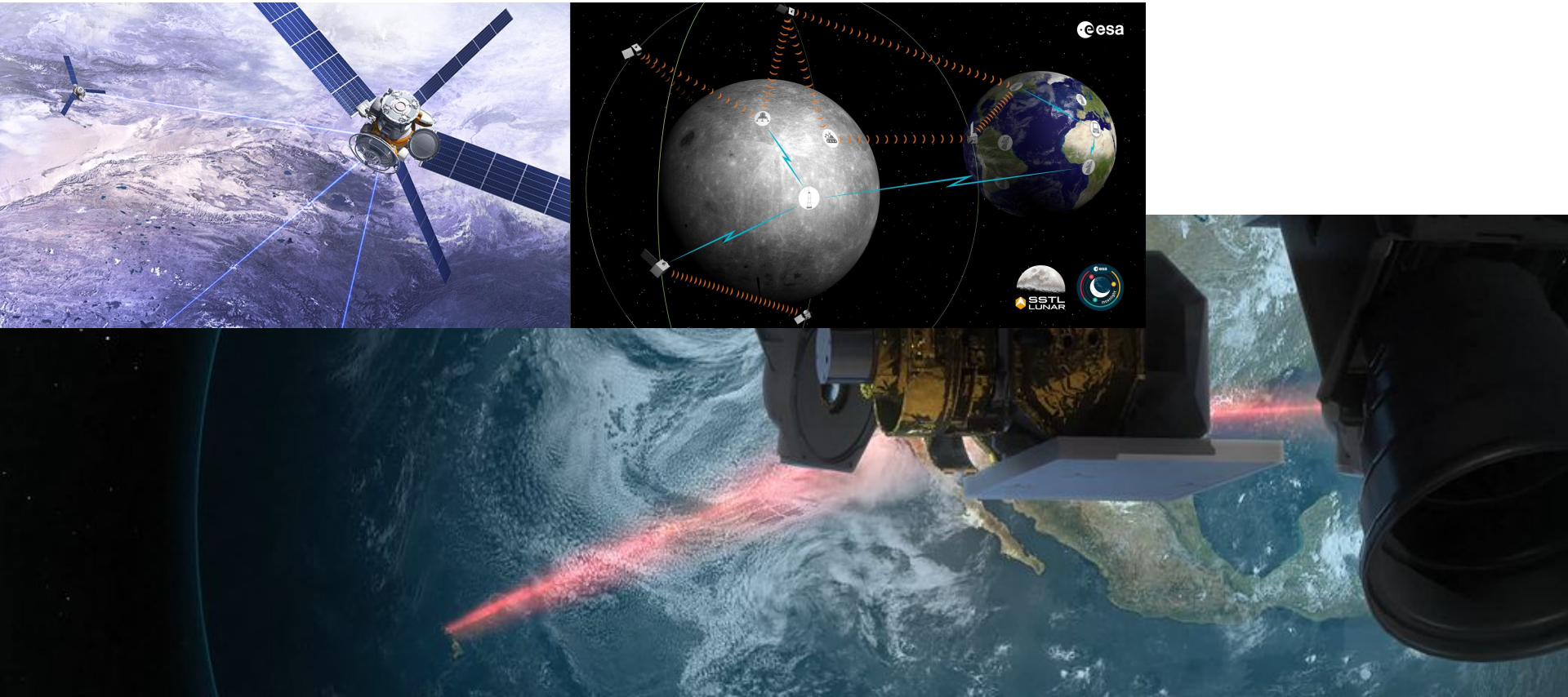
Ground Comms: How was it done before?



Ground Comms: What are the options today?



Comms: What will be the infrastructure of the future?



What is driving these changes?



Source: Preqin Pro. Data as of August 2020

Where is more work needed?

- Economy of scale challenges
 - Phased array scaling → lower price per data received/transmitted
 - Interoperability and ease of use
- Industrialization of optical systems
 - Space-to-earth readiness of telescopes
 - Earth-to-space adaptive systems
 - Free space optics
- Spectrum Management
 - Dynamic frequency allocation
 - Higher-frequency bands
- Viability of the commercial market
 - Earth observation
 - Telecommunications
 - Government programs

