



PANEL 2:

SPACE SYSTEMS TECHNOLOGY INNOVATIONS

TIME & DATE: 11:30 AM to 13:00 PM, Thursday, 15th June, 2017

VENUE: etc. Venues, Fenchurch Street, 8 Fenchurch Place, London EC3M 4PB

Summary

The panel provides a comprehensive overview of the developments in satellite manufacturing with opinions from a major GEO satellite operator, small satellite and subsystem manufacturers. All along the value chain competition on quality, price and timeliness is growing and remains concentrated among a limited number of suppliers. In the meantime, start-ups are eager to challenge the orthodoxy and customers are looking for more efficient capital expenditures.

Satellite technology is developing at its fastest rate in years driven by innovation and changing needs from satellite operators. In satellite communications, there is a battle now on between large increasingly high power, high throughput satellites (HTS) in Geostationary Earth Orbit (GEO), and low cost satellite constellations in low Earth orbit (LEO) offering low latency (signal delay) mobile broadband services from Low Earth Orbit (LEO). Between synergies and competition the market has not decided yet.

A flurry of Earth observation constellations and tracking applications are also booming in LEO. New Space companies also pushing the capabilities of cubesats and small satellites which are both challenging the status quo and stimulating the market in general.

Benefiting from Moore's Law, subsystems are providing experience higher performance at lower cost and enabling a smaller form factor. Innovation is visible all along the value chain in both small satellite industry and geostationary operators. Improvements are made in the payloads with use of software defined radio, high frequency radio bands and laser technologies boosting both mobile communications links and bandwidth. At the platform level, electric propulsion is now available and flight proven in GEO will be tested in LEO soon.

Key Topics

- What are the latest spacecraft technologies and why are they needed?
- How is technology driving satellite communications architectures overall?
- Why are commercial companies adopting small satellites?
- What are the constraints of using small satellite technology?
- Do subsystem manufacturers adequately support new satellite developments?
- How do subsystem companies perceive the market and its opportunities?
- How do operators and manufacturers convince insurers about new technology?

Moderator

Maxime Puteaux, Euroconsult

Key Note Speaker

Antonio Abad-Martin, Hispasat

Speakers

Craig Clark, Clyde Space
Ian Praine, SSTL

Mike Lawton, Oxford Space Systems
Christian Barnabe, Aon

Alex Clarke, ABSL