

R&S SATELLITE INDUSTRY DAYS PART 3; THE VIEW FROM SPACE



True to its agenda and meeting all expectations, at the R&S Satellite Industry Days Part 3, leading experts contributed to describing how the next generation of space industry shall revolutionize the traditional space industry by deploying a new generation of technologies with faster development and production cycles at reduced costs. By mostly operating in low-earth orbits, shorter satellite life cycles shall be affordable. The satellites are in total less expensive, so the NewSpace industry is more willing to run risks, to serve new emerging business cases.

NewSpace shall also incorporate advanced geostationary Very High Throughput Satellites, (VHTS) to provide many times the capacity and throughput of conventional satellites. This infographic shows the view of NewSpace resulting from a very productive day.

SATELLITE MANUFACTURER AIRBUS

Which benefits do you bring to the satcom ecosystem?
We provide critical national infrastructure to European citizens.

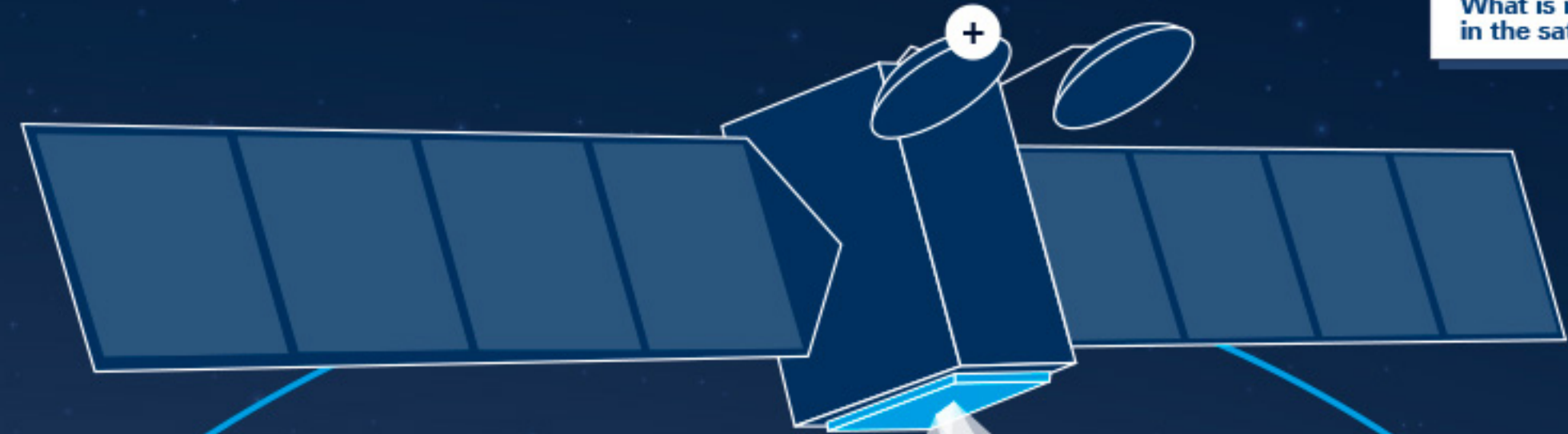
What is your greatest innovation developed in the recent period?
Flexible satellite payloads operating in LEO, MEO and GEO orbits.

What is missing in the satcom market? ▶ providing a huge reduction in the cost per kg of launch

Biggest challenge for satcom industry?
Competitiveness against improving ground based providers

Biggest challenge for your company?
Learn from ground based providers, since full "internet like connectivity" is new for the satellite industry

The Satellite Manufacturer develops and builds satellites platforms and payloads and sets the base for space infrastructures.



SATELLITE OPERATOR & NETWORK PROVIDER EUTELSAT

Which benefits do you bring to the satcom ecosystem?
We ensure reliable 24/7 operation of the satellites to satisfy the needs of the customers.

What is your greatest innovation developed in the recent period?
Automatisation of Operational Data out of satellite telemetry and technical conversion of Satcom and Mobile Communication Content delivery.

What is missing in the satcom market? ▶ openness of LEO operators to talk to us how to prevent RF issues

Biggest challenge for satcom industry?
Understanding if NewSpace is profitable

Biggest challenge for your company?
Too few pure RF satcom engineers on the market

VHTS adapt to actual current user demands by flexible beam steering of the antennas. Flexible payloads are used to respond in this way.



The Satellite operator and network provider defines the business case and contracts the satellite manufacturer to develop a satellite.

TEST SUPPLIER

Which benefits do you bring to the satcom ecosystem?
Verification of the radiation characteristic

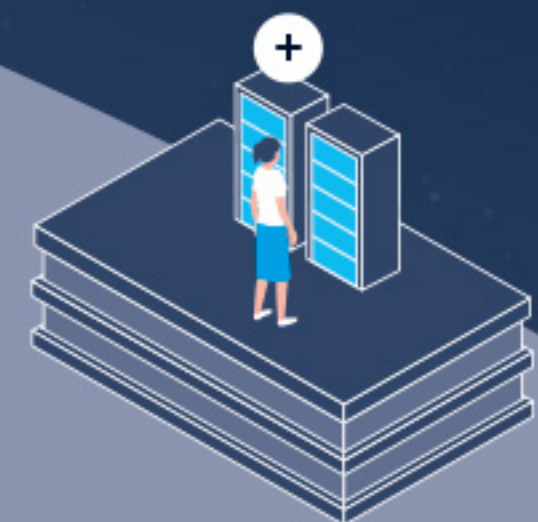
What is your greatest innovation developed in the recent period?
Establish far-field conditions at small distances, compact affordable test chambers and 3GPP compliant testing

What is missing in the satcom market? ▶ Standards to open the mass market

Biggest challenge for satcom industry?
Provide user terminals at an affordable price for the mass market

Biggest challenge for your company?
testing flexibility device-wise but being comparable though

The test supplier of test chambers validates the antenna performance, which is key for a proper RF connection.



SATCOM AND SPACECOM EQUIPMENT MANUFACTURER WDMK

Which benefits do you bring to the satcom ecosystem?
We are satisfying the increasing bandwidth demands and set new waveform standards

What is your greatest innovation developed in the recent period?
Making Ka-band a commodity, venturing into V-band and driving a lot of waveform developments around DVB-S2X

What is missing in the satcom market? ▶ a common standardization across all purposes

Biggest challenge for satcom industry?
Not drift into a closed-system market

Biggest challenge for your company?
Transform ground infrastructure into state-of-the-art environment.



The Satcom and Spacecom equipment manufacturer supplies the processing of data and sets the technical basis for dealing with increasing bandwidths and new standards.



New LEO and MEO constellations will create huge new markets of end users, all needing user terminals. The tracking of the moving LEO satellites at high speeds, accurate pointing by the antennas over a large angle scan and a seamless switching from one antenna to the other are only few of the challenges.

The system integrator assembles the test instruments and matches them up so that the test suites can be run efficiently with the special software.

SYSTEM INTEGRATOR CALIAN

Which benefits do you bring to the satcom ecosystem?
We provide the equipment that enables our customer to provide the satellite communication services to the end customers

What is your greatest innovation developed in the recent period?
Composite carbon fiber antennas and other products. Services to enable communications at Q/V-band. World leader in software defined systems that manages satcom payloads.

What is missing in the satcom market? ▶ Standards as in the cellular market

Biggest challenge for satcom industry?
Finding the right market potentials

Biggest challenge for your company?
Extending frequencies and bandwidths ever higher

