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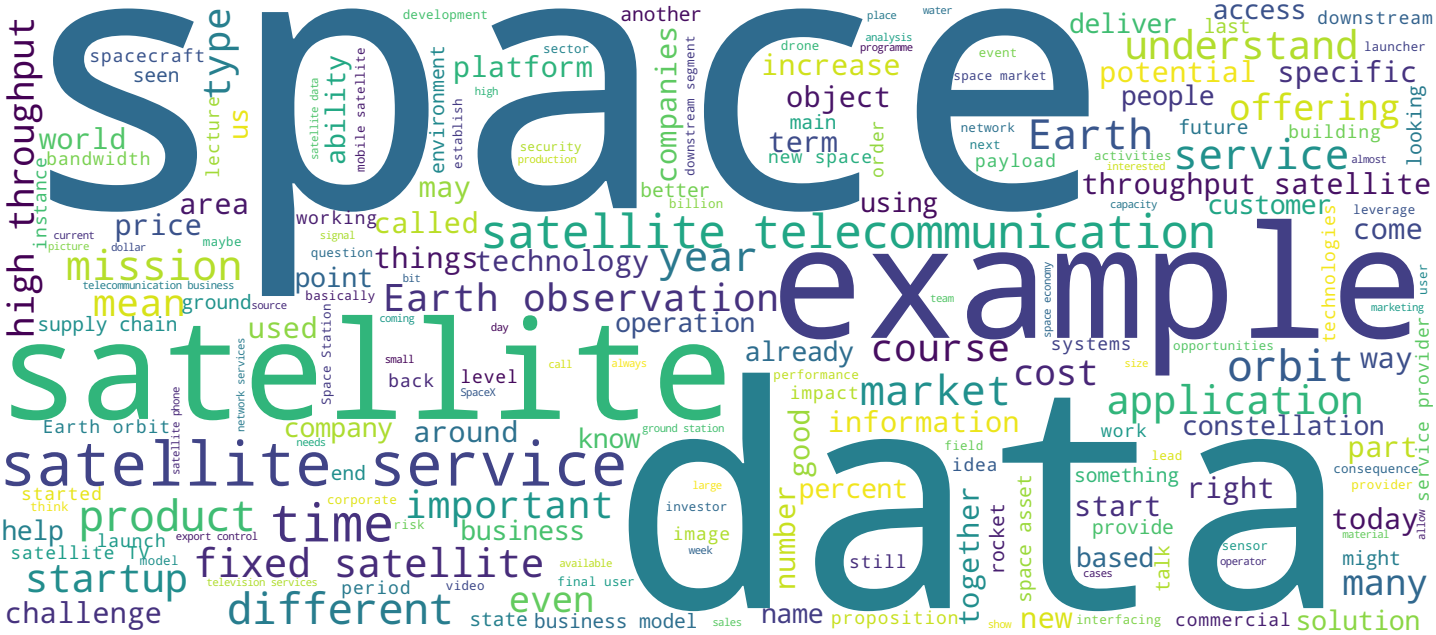
SatCom market size and newcomers

New Space Economy

Andrea Alberti
PMOD/WRC

École polytechnique fédérale de Lausanne



Search MOOC

Video

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SatCom: Market Share and Future Declinations

- Market Share of SatCom
- SatCom Declinations

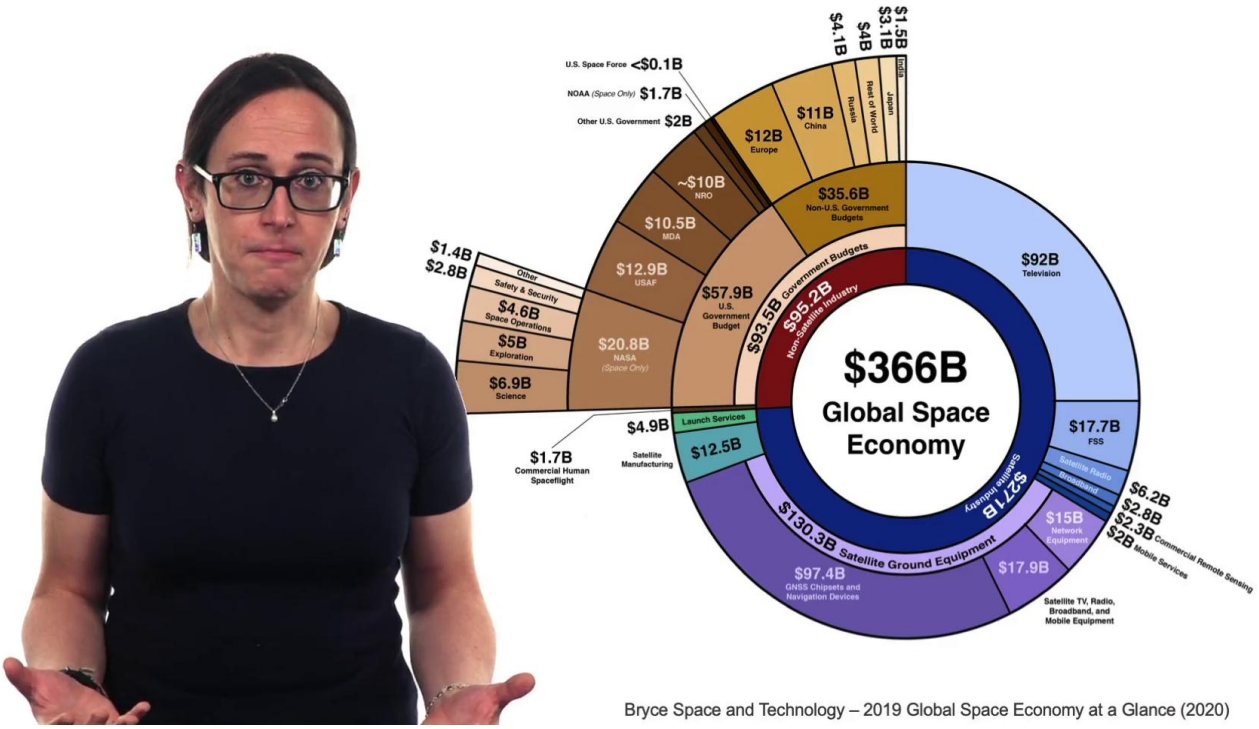
Hi and welcome back. My name is Andrea Alberti. In a previous model together, we have been looking at the basics of the space assets and of satellite telecommunication. Together now, we will look into the satellite telecommunication business from a slightly different perspective. We will look at its market share, and then we will try to understand what is the impact beyond the [inaudible 00:00:35] business. Then, we will have an overview about the ongoing changes in the satellite telecommunication, its future declinations.

Notes

Summary

0m 05s

SatCom Market Share



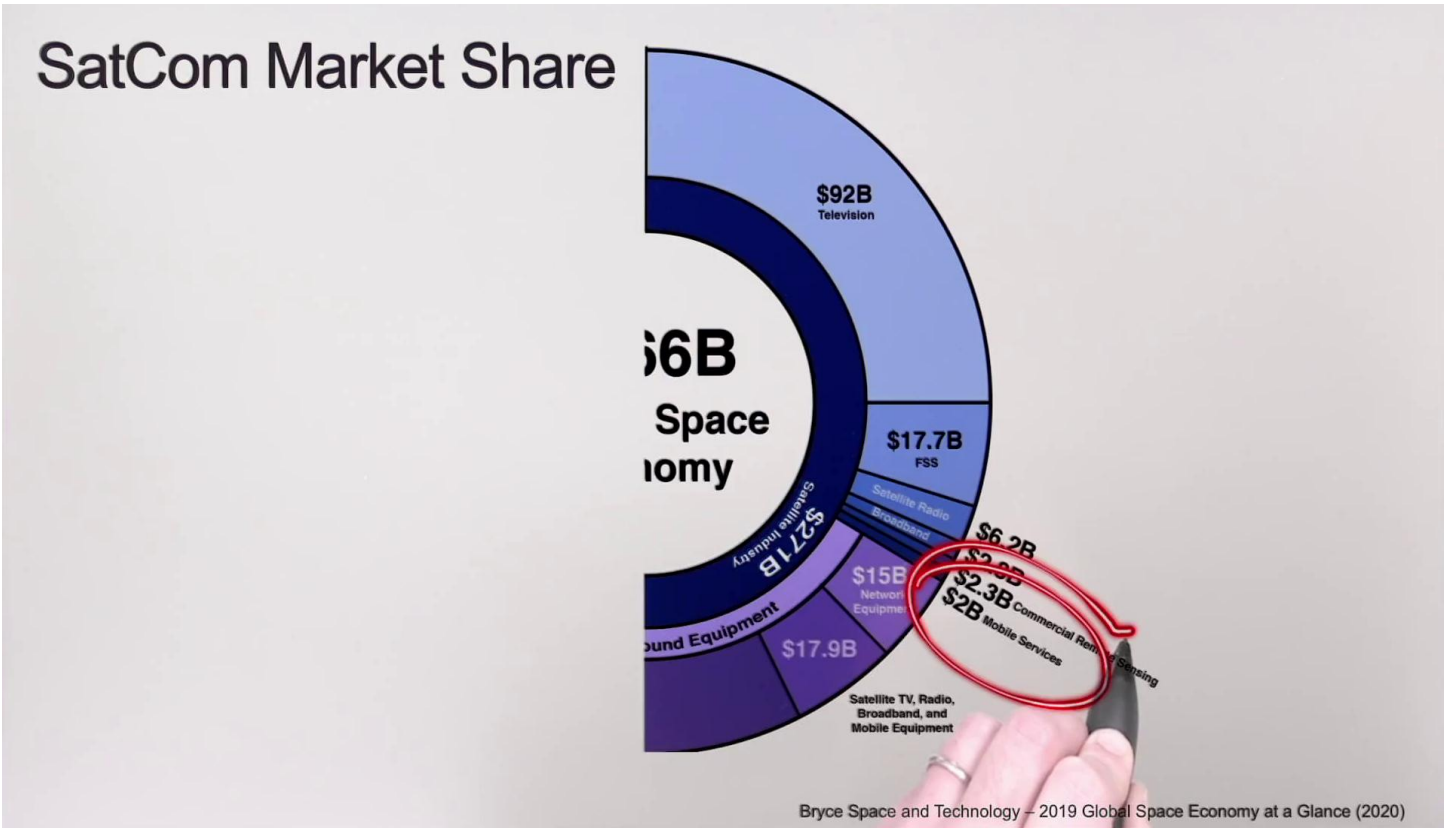
Bryce Space and Technology – 2019 Global Space Economy at a Glance (2020)

What we can see here is one of the most-known representation of the global space market. Space market representation generally capture the overall space supply chain from the upstream to the downstream, from the launchers to the satellite to the ground stations to the downstream services. But this and other representation, according to experts, fail to represent and capture the real impact of space beyond the downstream. We recall that the downstream market is that part of the space supply chain that interfaces with the other industrial verticals. The downstream is where the real societal and economic effects of space start to be perceived by non-space business.

Notes

Summary

0m 45s



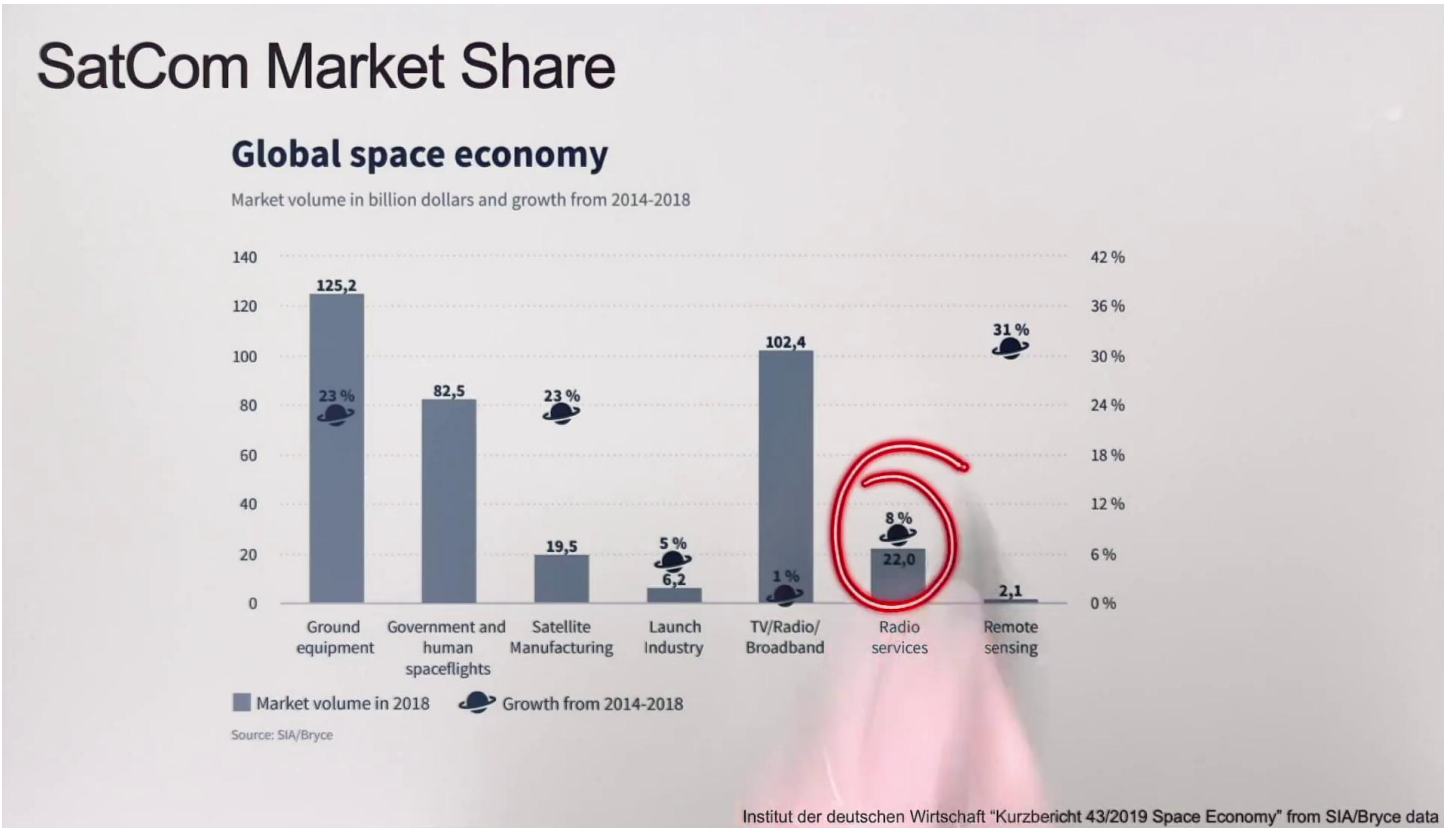
So let's Zoom in and let's try to understand together the downstream segments of satellite telecommunication business from an economical perspective. The television services together with the radio services, they sum up to about $98 billion. Broadband services, delivered through high-throughput satellites account for $2.8 billion. Fixed satellite services account for $17.7 billion, while mobile satellite services represent a 2-billion US dollar of the overall global space market.

Notes

Summary

1m 44s

SatCom Market Share



Institut der deutschen Wirtschaft "Kurzbericht 43/2019 Space Economy" from SIA/Bryce data

In this representation, we can see that the aggregated data provide to us additional information. Satellite services as TV, radio, and broadband, they sum up $202 billion. That is roughly the same figure that we analyzed in the first graph we analyzed. But when we look at the growth rate over the four years from 2014 to 2018, it accumulates to about one percent. Instead, mobile or satellite services, The team, this presentation that recalled radio secvices. They accumulate a growth rate from 2014 to 2018 of about eight percent.

Notes

Summary

2m 35s

SatCom SatCom Market

Fixed Satellite Service (FSS) providers

Copyright and trademarks to the respective businesses

What these data are telling us? Well, we have to look a bit beyond this data. Up to 2010, the satellite telecommunication market was dominated by operators offering two main types of services. The first one is the fixed satellite services, or FSS, as we name it, to serve fixed ground facilities through high bandwidth. These were delivered by the backbone of the telecommunications satellite industry, incumbents. The use of satellite services was reserved for exclusive users or have just seen for satellite TV. The network services beyond the satellite TV were certainly not accessible to common users like, for example, me or you. And only few businesses most likely were interested or could get access to these satellite services.

Notes

Summary

3m 24s

SatCom SatCom Market

THURAYA Globalstar iridium

Mobile Satellite Service (MSS) providers

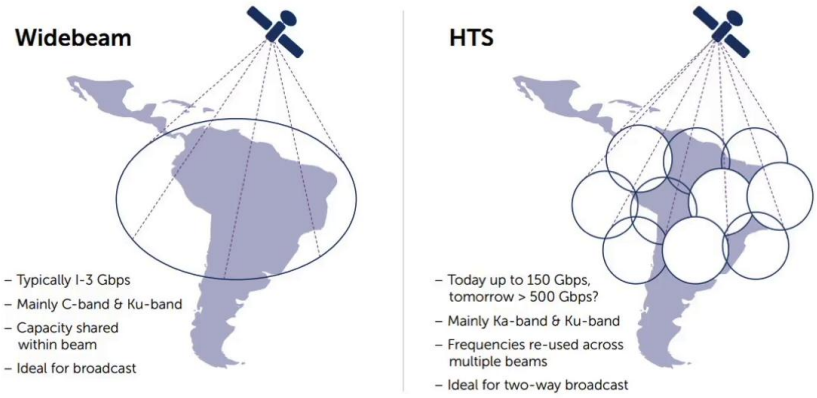
The second category of satellite services are mobile satellite services, of which satellite phones are a subset. They started to appear in the mid of the 1990s. Their offering was to serve mobile users with maybe limited bandwidth, but the ability to access the network from anywhere in the world amasses initiated a wave of vision change. The satellite network forethought that it was limited and not meeting maybe the expected latency could effectively be accessed by everybody, or almost.

Notes

Summary

4m 31s

SatCom Market



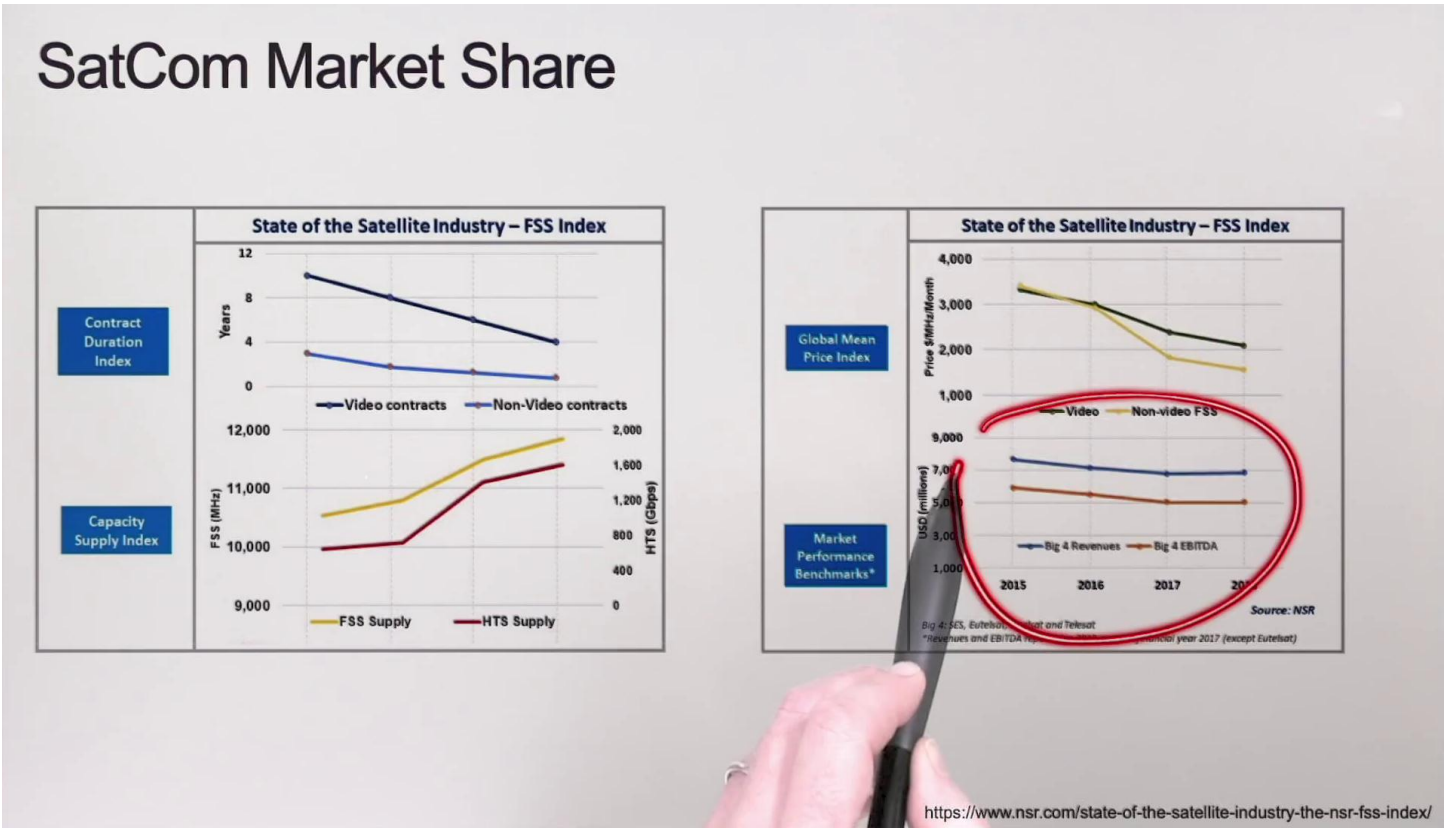
https://www.intelsat.com/wp-content/uploads/2020/08/Intelsat-Technologies-in-Space-Report.pdf

From 2011 onward, a new type of telecommunication services was made available as an alternative to the traditional fixed satellite services, that here are called widebeam. These new services, made available through high-throughput satellites or HTS, increase the offering in terms of bandwidth and of lower cost per bit. This was extremely challenging for the fixed satellite services providers.

Notes

Summary

5m 15s



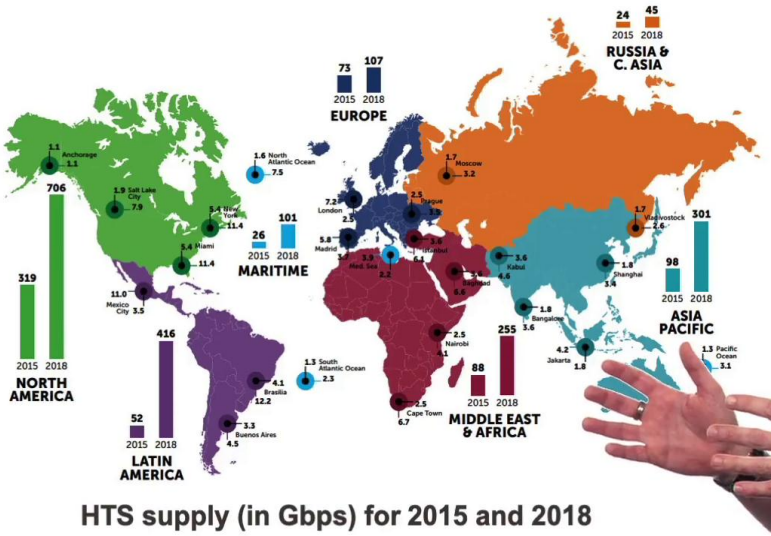
Let's look at the consequences on the market. First of all, let's look at the capacity supplied through satellites. Fixed satellite services were able to deliver, from 2015 to 2018, an increase of capacity of about 15 percent. On the other side, high-throughput satellites from 2015 to 2018 doubled their capacity. How this impacts the market? Well, let's look at the contract duration. For television services, in 2015, the average contract duration was 10 years; in 2018, it was four years. And for non-TV services, so normal network services, normal agreements, contracts went from about three years to less than one. Let's look at the consequences on the average price to the user of fixed satellite services. From 2015 to 2018, the prices dropped by almost 50 percent for both television and non-television services. Nevertheless, the overall market performance of the service providers was relatively stable. It dropped off about 10 percent in the overall.

Notes

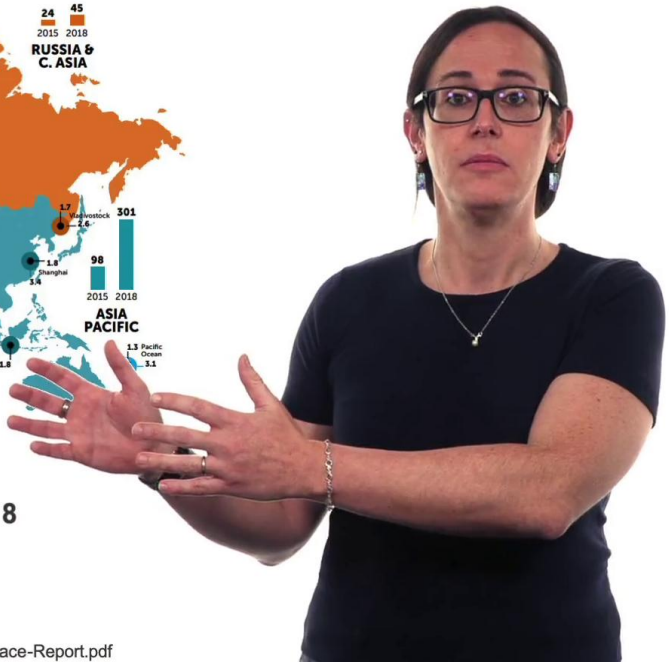
Summary

5m 48s

SatCom Market Share



HTS supply (in Gbps) for 2015 and 2018



https://www.intelsat.com/wp-content/uploads/2020/08/Intelsat-Technologies-in-Space-Report.pdf

Over the same period of analysis from 2015 to 2018, the consumption of satellite communication services through high-throughput satellites was steeply increasing.

Notes

Summary

7m 40s

SatCom: Beyond the Market Share

- Telecommunication access for rural and remote areas , with minimal infrastructure
- Humanitarian Intervention
- Rapid Disaster Management
- Distance Learning
- Telemedicine and E-Health

Inmarsat “Sustainable Development White Paper”
“Exploring Space Technologies For Sustainable Development” UNCTAD
“Satellite Communications: Impact on Developing Economies” Journal of Emerging Trends in Computing and Information Sciences

Beyond the financial figures, satellites have been bringing telecommunication access anywhere in the world with a minimal infrastructure. This allowed the possibility to establish a portfolio of opportunities, the ability to support humanitarian intervention in war areas, the ability to offer rapid response and to reestablish basic services in disaster areas, the opportunity to establish distance learning methods and to serve population with telemedicine and E-health systems.

Notes

Summary

7m 53s

SatCom: Beyond the Market Share

GESI and Accenture Strategy "Enabling the Global Goals – Evidence of Digital Solutions' impact on Achieving the Sustainable Development Goals (SDGs)"

In the words of a recent report, an increase of five percent in digital access for developing countries would positively affect our world by decreasing anatomy mortality and by increasing scolarisation that would lead to an increase in equal opportunities.

Notes

Summary

8m 34s

SatCom: a Change of Seasons?

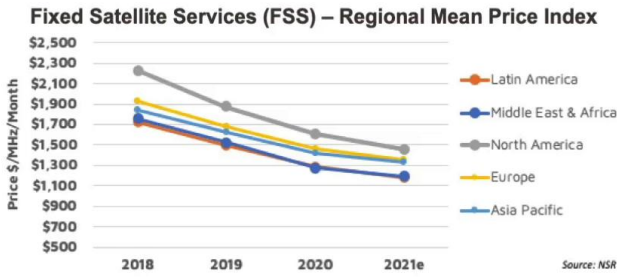
I was mentioning a few moments ago about the turmoil in the satellite telecommunication business. Not only the incumbents initiated to deliver affordable, fixed, and mobile satellite services, high-throughput satellite service providers have been challenging the market with extremely competitive offering. And now, newcomers have been starting to challenge the market with value propositions that look unbeatable.

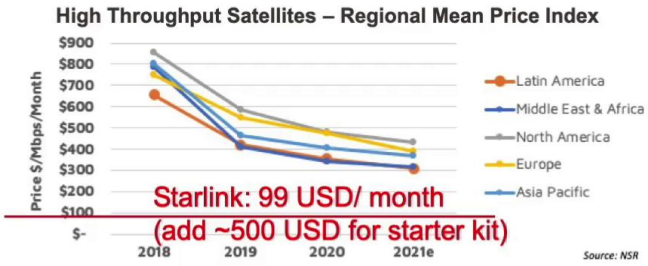
Notes

Summary

8m 54s

SatCom: a Change of Seasons?





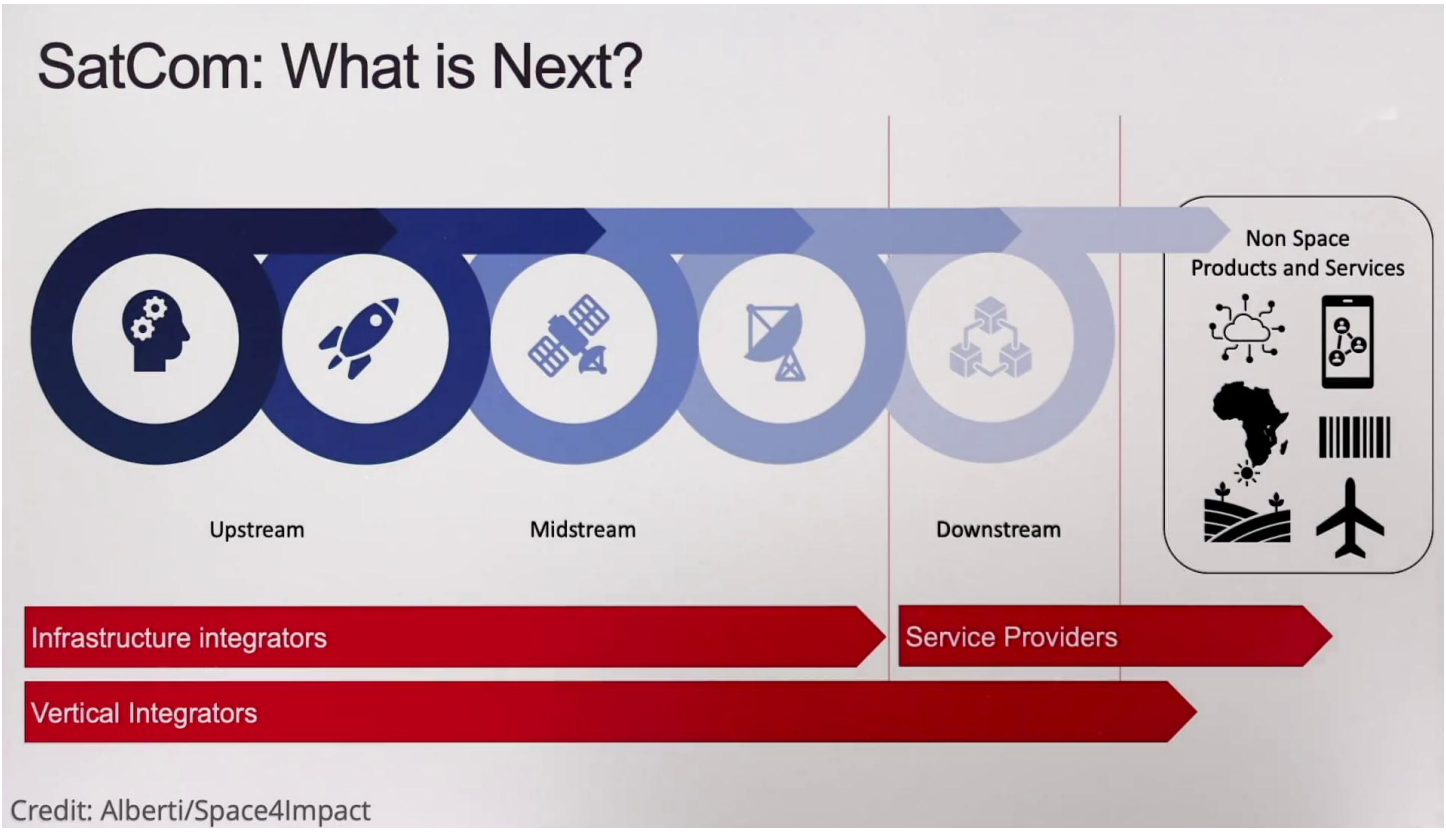
https://www.nsr.com/the-evolution-of-satcom-price-discounting/

We saw together how the prices of fixed satellite services have been dropping of about 50 percent in the period from 2015 to 2018. And here, more prices at the consumer level are reported. They are reported in terms of that allowance, that is dollar per megabyte per second per month. We can observe two things. First is that the fixed satellite services have prices that have nearly double or the triple of high-throughput satellite services. The second element is that over the period from 2018 to 2021, the prices kept decreasing for both FSS and HTS. And now, let's look at how newcomers are disrupting the market of telecommunications satellite. Newcomers have been recently entering the market by offering a value proposition to the final user that is comparable to what ground infrastructure services are offering us both in terms of price and of performance. The difference is that the services of satellite telecommunication, newcomers can be literally accessed from anywhere in the world.

Notes

Summary

9m 27s



When we look at satellite telecommunications or any type of services and products, we have to try to understand with whom we are interfacing. In the case of satellite telecommunications, most of the times, we are interfacing with service providers. A small reminder. Every time that we are looking at services or products from any type of industrial vertical. In general, we are interfacing with the last bit of the supply chain that is of interest for us. In the case of satellite telecommunications services, the final users are generally interested to interface with the downstream segment. The downstream segment of satellite telecommunications is generally served through providers that are offering the services that leverage on the space assets that have been built by infrastructure integrators. There are only a few cases of vertical integrators that build the full supply chain from the upstream up up to the service delivery to the final users.

Notes

Summary

10m 54s

SatCom: What is Next?

This reminder. Because there is an increasing amount of offerings that are coming up, offering that want to deliver broadband network capabilities or try to leverage on different or niche business models as it is the case of satellite IoT, or for the case of communication networks that are specific of dedicated space assets like, for example, Earth observation satellites. The landscape of satellite operators that propose tailored network services at affordable prices for dedicated user segments constantly expanding. Each operator and each new service tries to nurture a specific value proposition and a specific market segmentation.

Notes

Summary

12m 17s