Media Tech Intelligence Briefing:

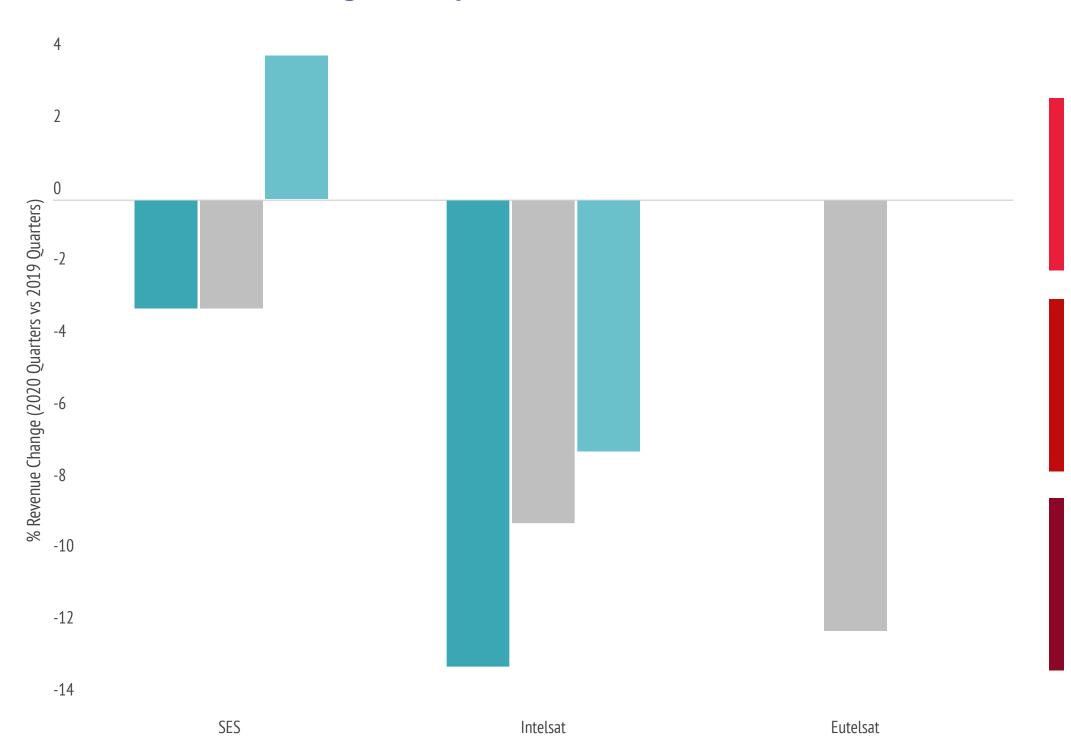
Satellite

January 2021



Effects of the COVID-19 Pandemic on Satellite Services

Revenue Change at Major Satellite Service Providers



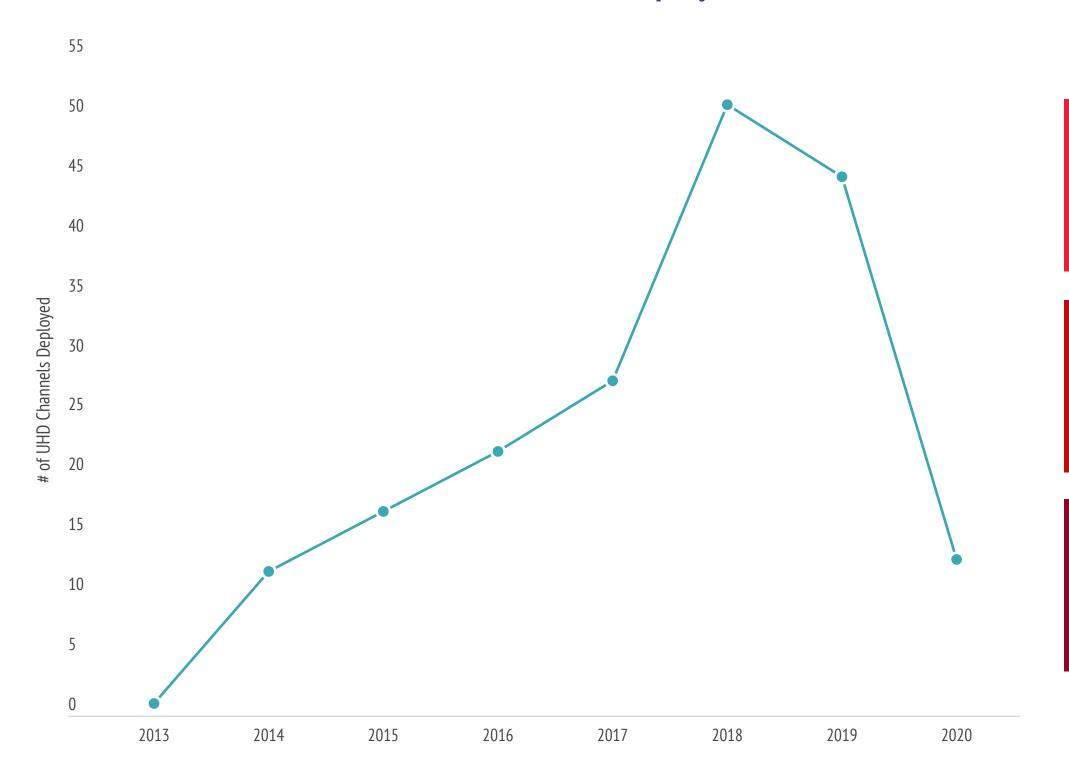
Revenues at major satellite providers such as SES, Intelsat and Eutelsat decline dsignificantly in 2020 due to the impact of COVID-19 on the satellite business

COVID-19 impacted revenue drivers such the transition to 4K/UHD; the occurrence of major sports events; the acceleration of the transition to DTC models / Pay TV decline

Closing stock prices at SES, Intelsat and Eutelsat were down by -32%, -86% and -32% between January and November 2020, highlighting a very tough year

UHD Slowdown

Number of UHD Services Deployed



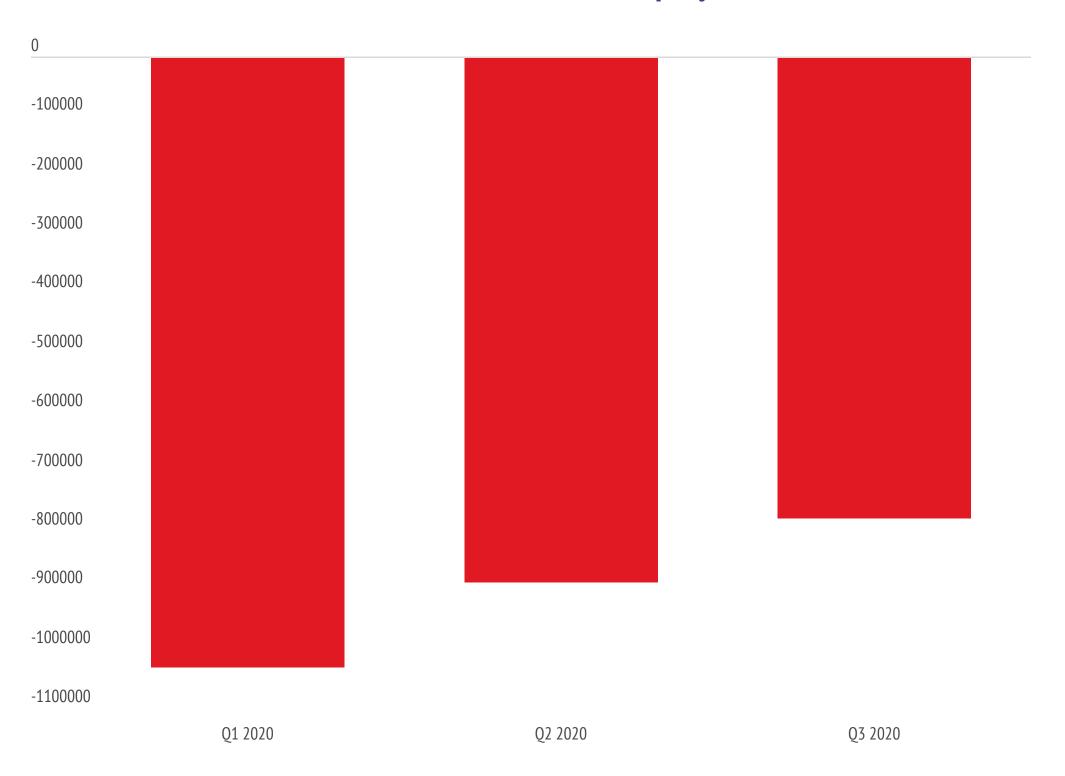
Satellite spending is driven by the upgrade to new television formats such as 4K/UHD. The slowdown in this transition in 2020 has impaired an important revenue driver

In 2020, according to data provided by the UHD Forum, only 1 out of the 13 new services launched relied on DTH as the transmission medium

IABM expects spending on UHD tech to continue to be impaired in the foreseeable future as broadcasters streamline their legacy operations

Pay TV Market Decline

Number of UHD Services Deployed



99

We have a better product in the market right now for those people that we can pair with broadband. The AT&T TV product is a much more natural fit in terms of how customers want to use a pay TV service today thanthe satelliteproduct is... I'm not going to suggest to you that it's anything but a mature business. It's going to continue some degree of decline.

John Stankey, CEO, AT&T (Q3 2020 Earnings Call)

Satellite Pay TV in the US has lost the largest share of Pay TV subscribers in 2020, driven also by the cancellations of sports events

2020: Tough Year for Satellite Move to DTC

99

Given the various developments in the OTT area and the emergence of new players in this industry, some of our broadcast customers are under pressure and are reducing the capacity on the contracts

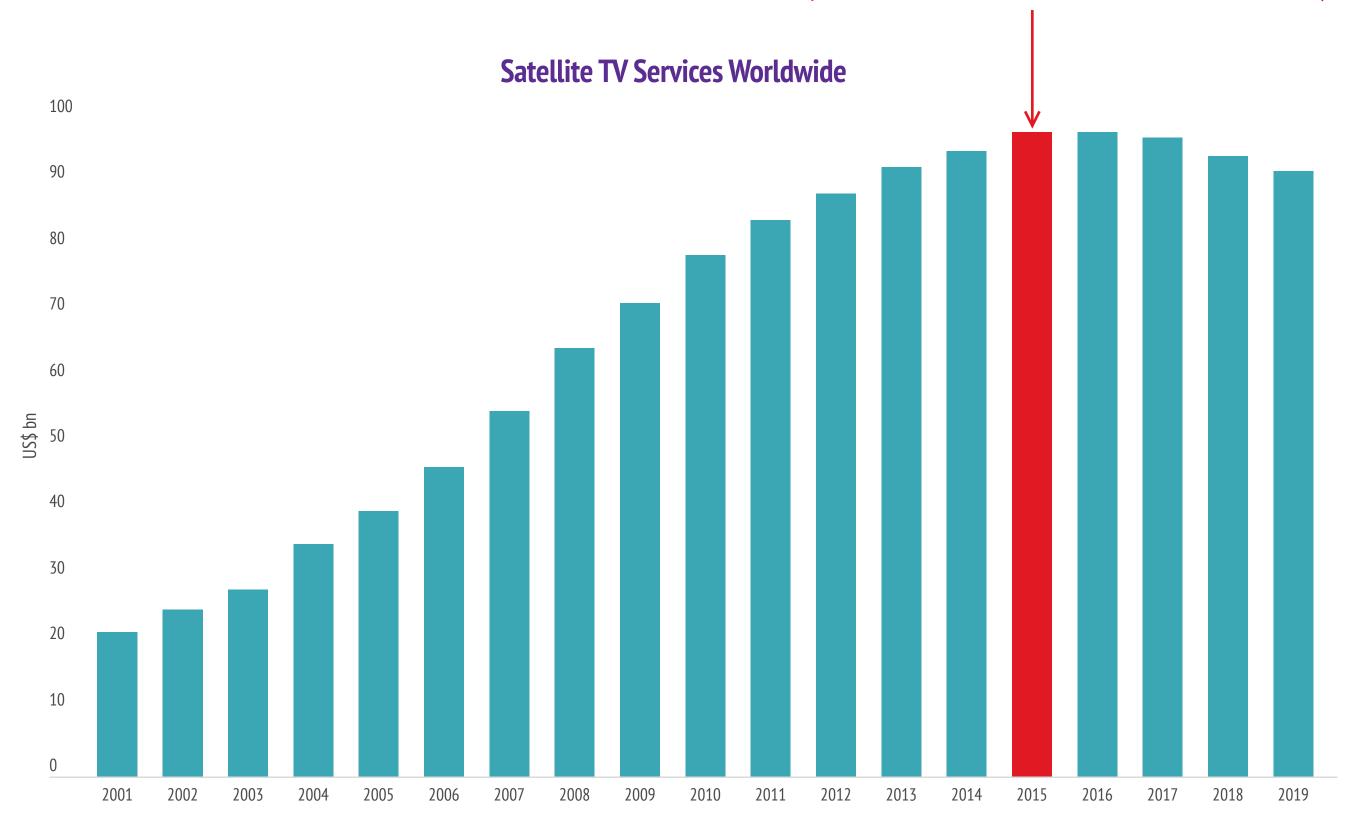
Ferdinand Kayser, Former CEO, SES Video (Q1 2020 Earnings Call)

The pandemic has accelerated broadcast and media companies' move to DTC services, forcing a reallocation of budgets away from legacy operations such as satellite

This has translated into reductions in satellite capacity by major media companies in 2020 in an effort to streamline this expense

DirecTV Case Study





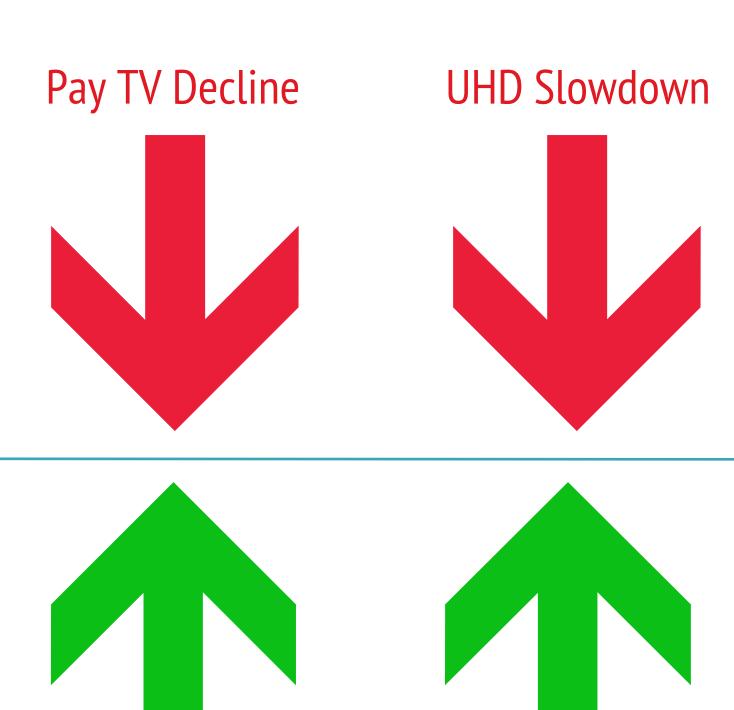
Bidders line up for AT&T's troubled DirecTV business

"AT&T has received at least three offers that value its troubled satellite division DirecTV at more than \$15bn, a fraction of the sum the US telecoms group paid for it in a high-profile deal five years ago"

From Financial Times, 9 December 2020

Media Tech Investment

Strategic Changes in Revenue Drivers for Satellite Business



IP/Cloud Growth

The structural decline of the video industry's historical revenue drivers is forcing a strategic repositioning at different satellite operators

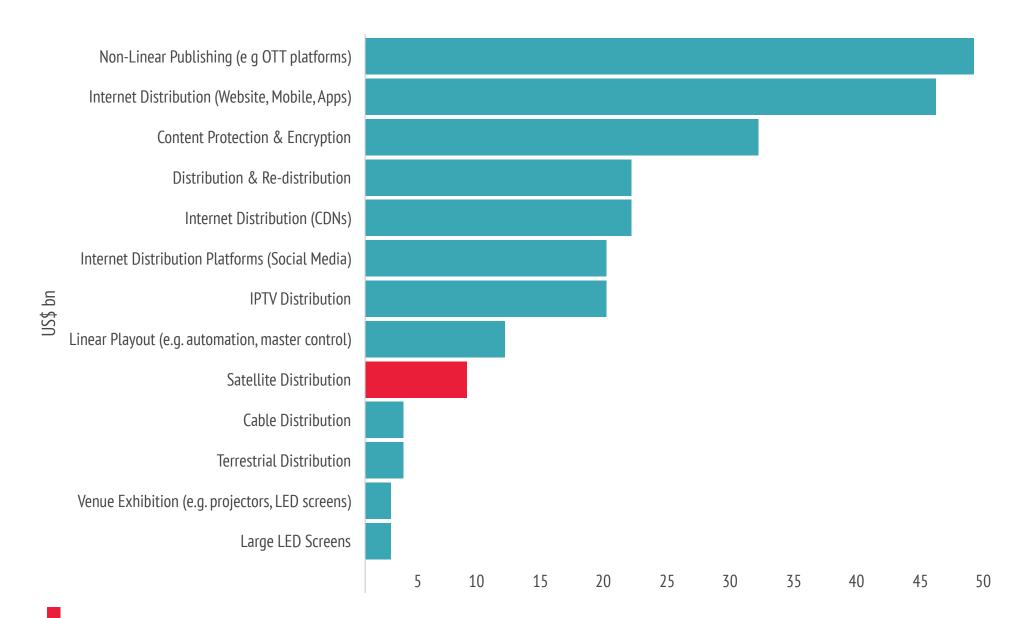
Eutelsat's investment in Broadpeak (2019) highlights a move to provide backbone for mobile OTT services. Also, satellite operators making partnerships with cloud service providers

OTT Growth

Media Tech Investment

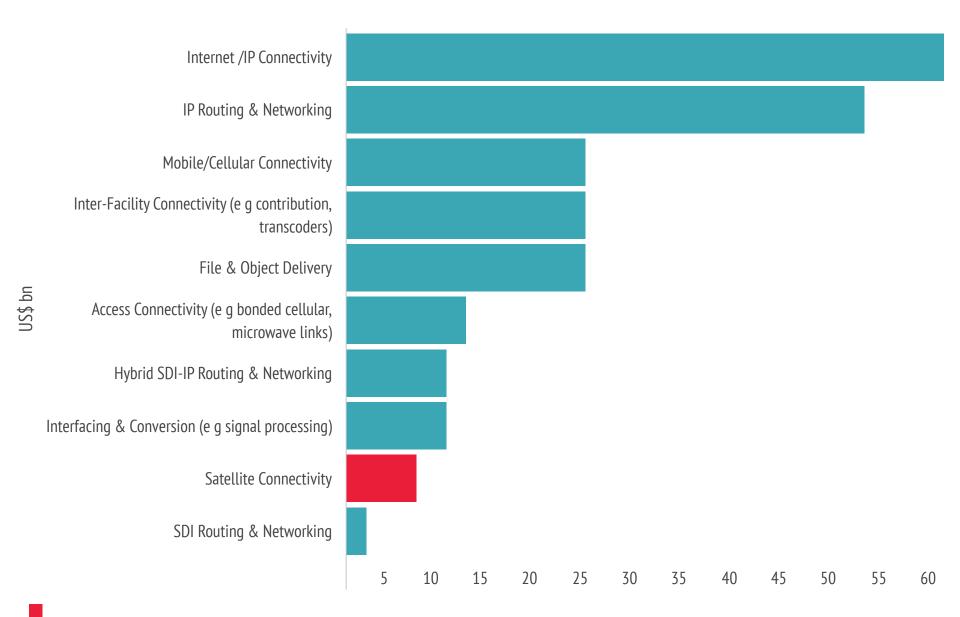
Publish and Connect Investment

Top Investment Categories in Publish – Media Companies



Broadcasters consolidating traditional distribution channels such as satellite to reallocate resources towards DTC

Top Investment Categories in Connect – Media Companies



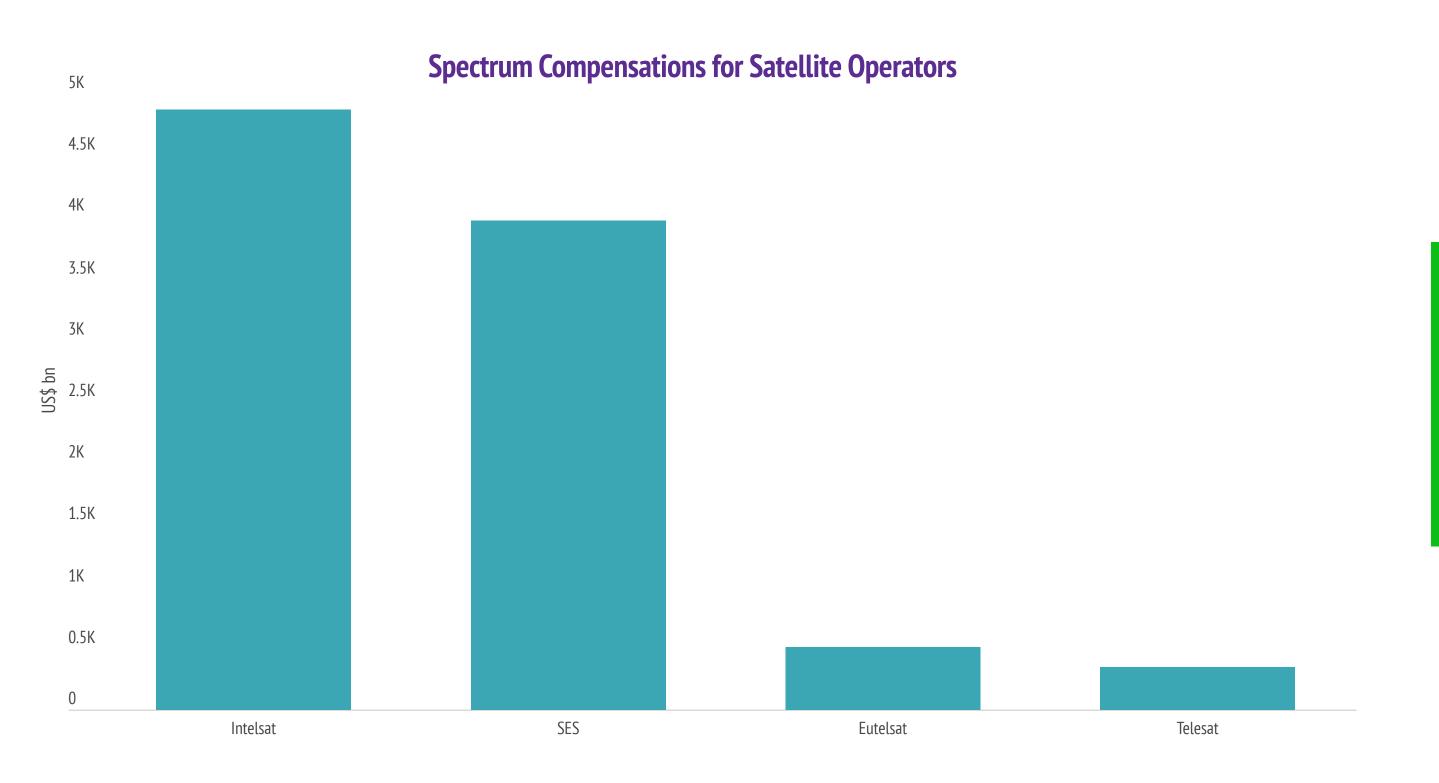
Broadcasters are investing more in cloud and IP-based connectivity solutions across the content supply chain



Sources: IABM

The Satellite Business

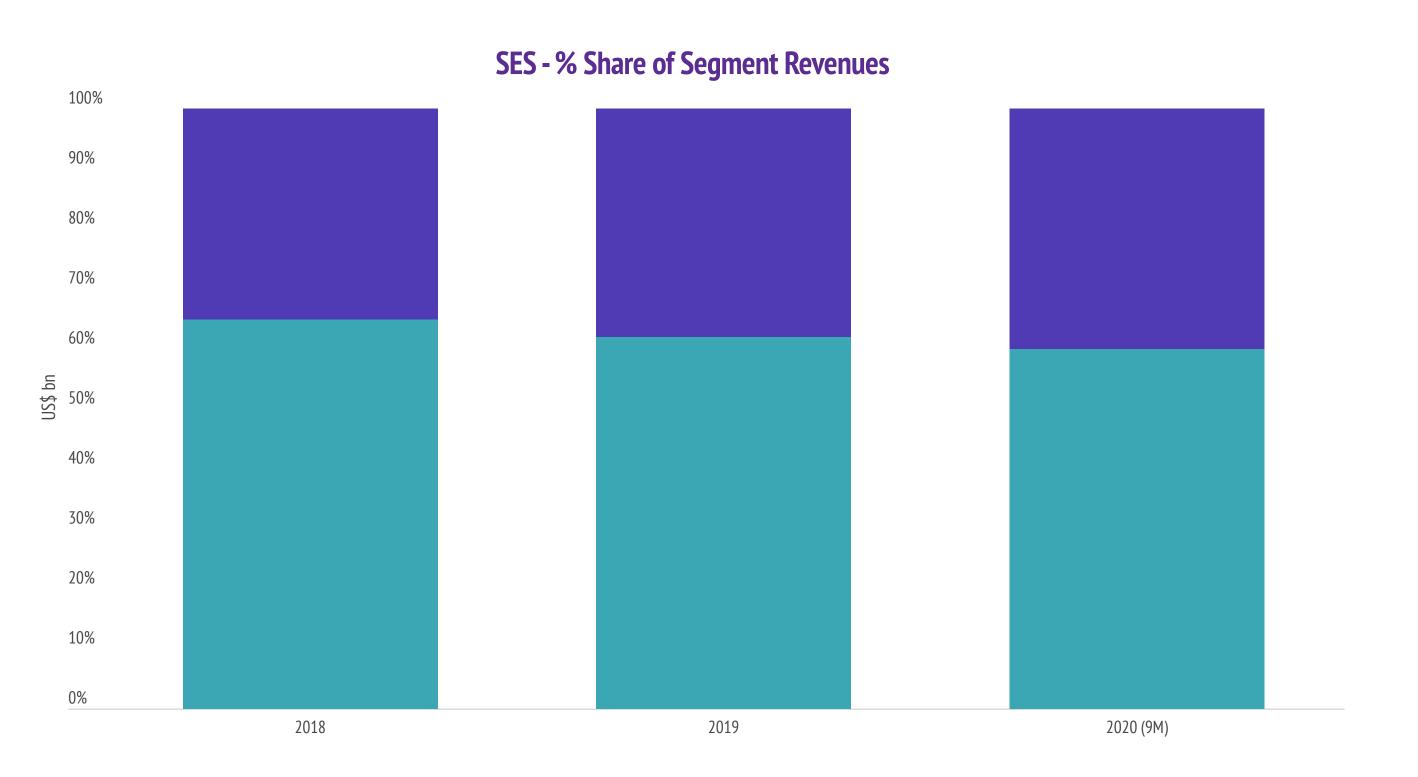
C-Band Spectrum in US – Welcome Windfall



Spectrum compensations should act as financing tool for satellite operators in transition though most of them said they will use it to strengthen their balance sheets

The Satellite Business

Networking

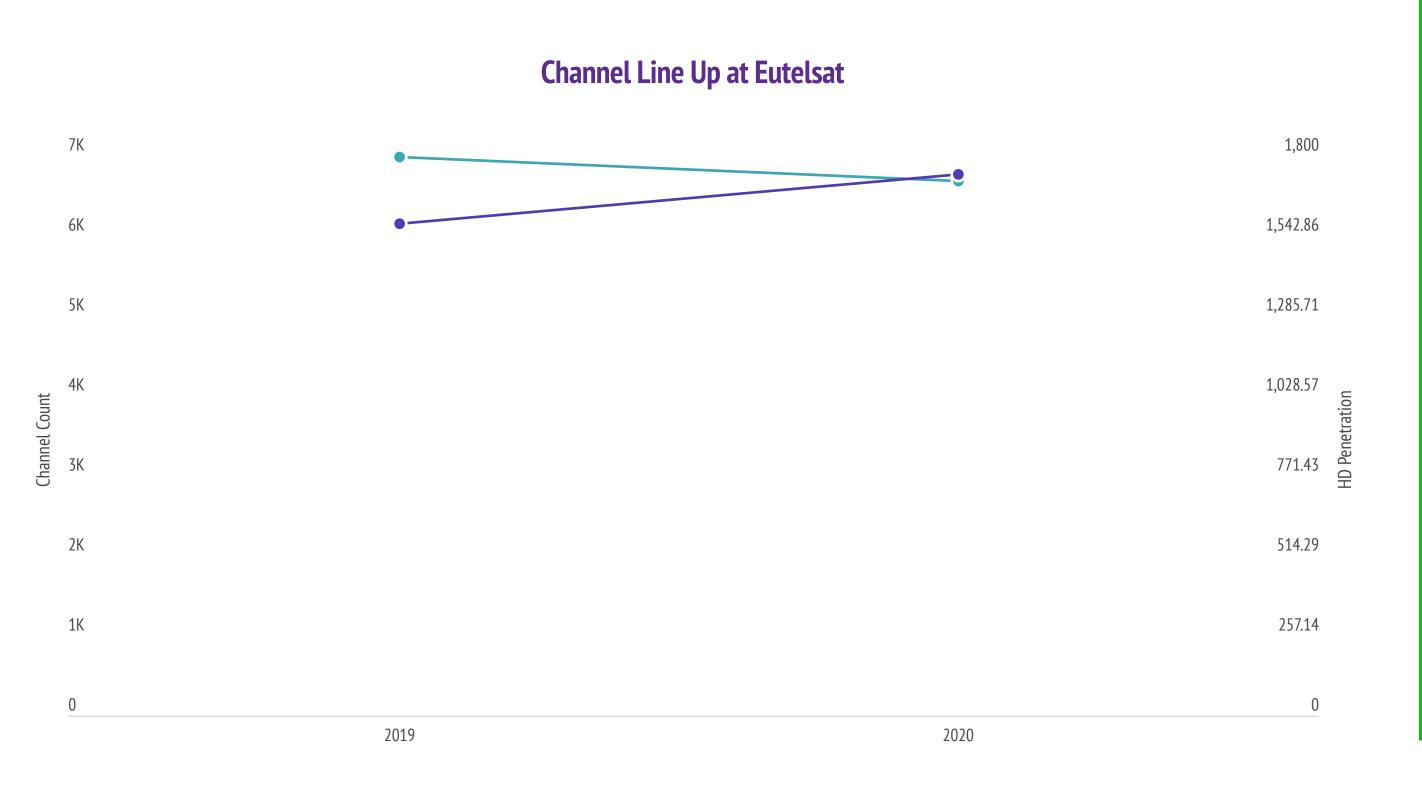


Satellite operators have been gradually shifting their revenue profiles away from video and broadcasting and towards the fastest-growing networks business

Networks business has been growing for most operators and has been robust to COVID-19

The Satellite Business

Different Resolutions



While the channel count at
Eutelsat went down, HD
penetration went up YoY,
emerging markets such as Africa
and Latin America show a
completely different picture
compared to Europe/North
America:

- Satellite Pay TV revenues in countries such as Argentina are going up
- Pay TV subscribers at African operators such as

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