

HDFI • 2022 INNOVATION DAY

Verso un ecosistema audiovisivo 5.0
Infrastrutture, servizi e tecnologie

ROMA 25 NOVEMBRE 2022

ULTRAHD
FORUM ITALIA
Beyond Definition



Il Satellite e l'Ibridazione della TV

Cristiano **BENZI**

SVP Global – Professional Video



SATELLITE BENEFITS



COST EFFICIENCY

- Fixed Costs
- Affordable and Standard Receivers





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UNIVERSAL REACH

- Wide Footprint
- Constant Performances

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SERVICE QUALITY

- High Throughput
- High Availability

THE SATELLITE IS PERFECT FOR HIGH QUALITY CONTENT

2016



THE RISE OF OTT SERVICES



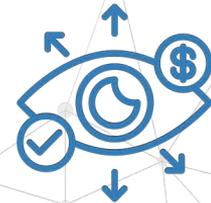
Netflix, over 220 million paying subscribers, with a market cap at \$160 billion, starting to bid on sport leagues rights and launching ad-supported tier in 12 countries and first live event in Q1 2023



DAZN, Apple+, Disney, Amazon Prime and other OTT players with exclusive content rights distributing live sports



More than 3 billion OTT users in 2021



Next to SVOD, **AVOD and Fast Channels** are becoming the “big thing” in the media landscape

THE CHALLENGE FOR VIDEO DISTRIBUTION

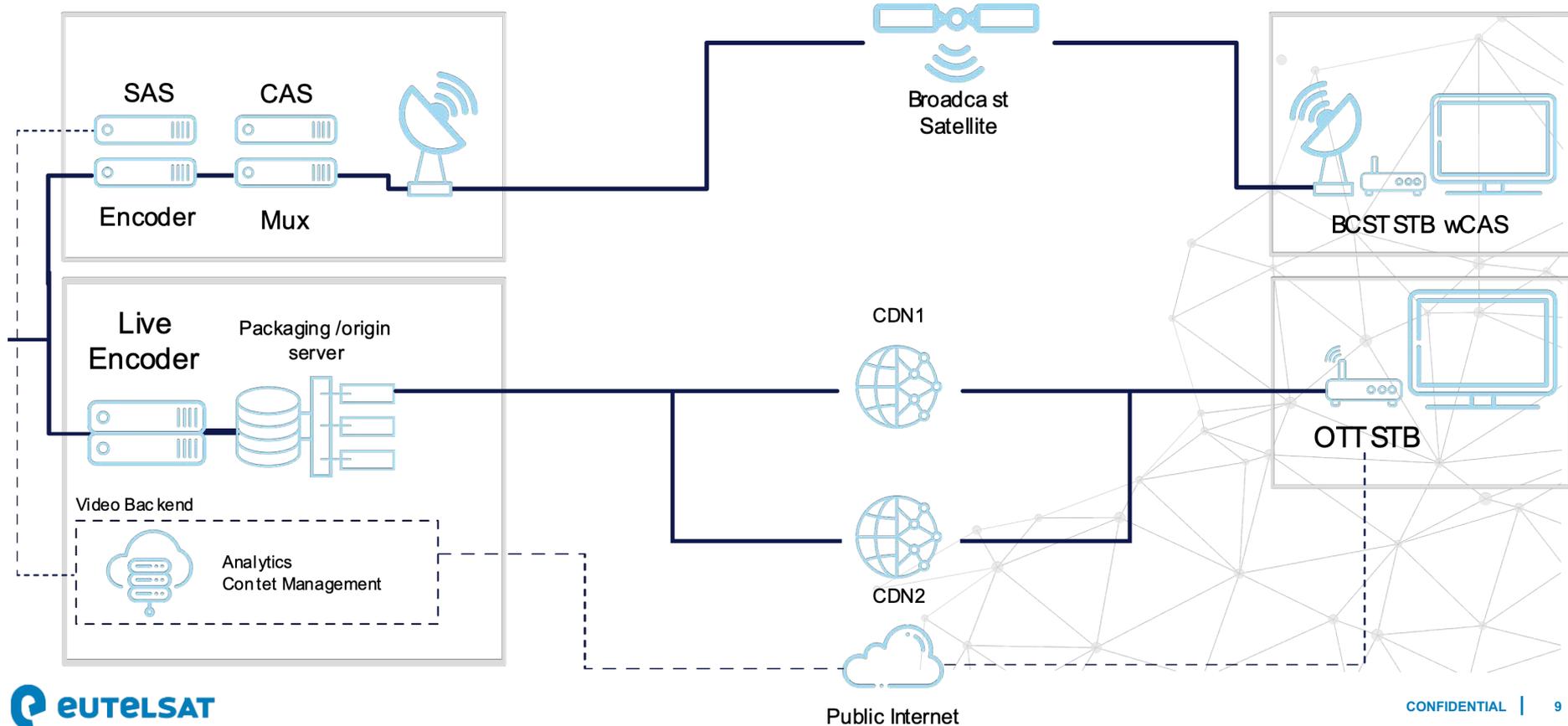
How to address

- Multiple media formats
- New devices and means of access
- Changing audience behaviors
- Network infrastructure costs reduction
- Consistent user experience



MEDIA COMPANIES APPROACH TO CONTENT DISTRIBUTION

Two separate infrastructures for broadcast (sat/cable) and over-the-top streaming



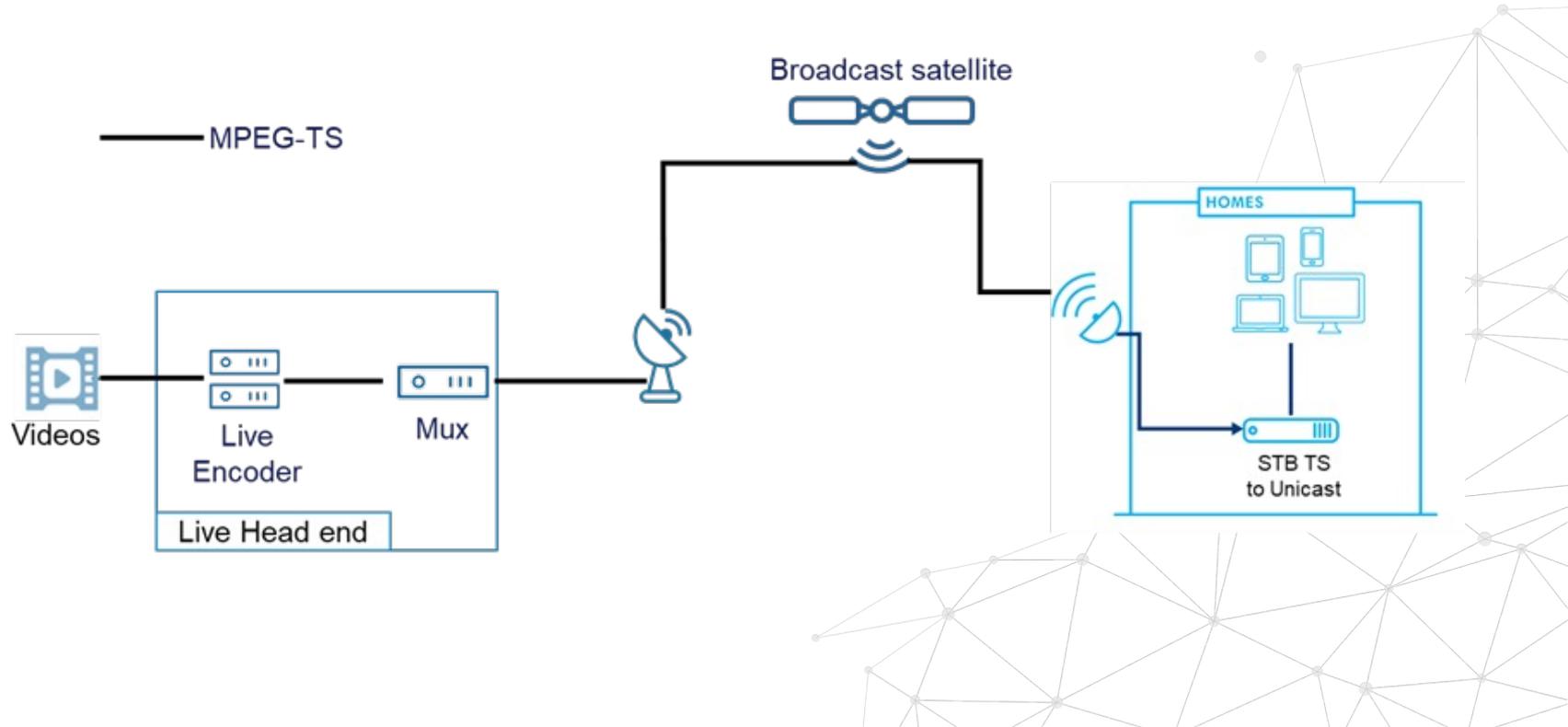
DVB HB

DVB NIP®

Home Broadcast

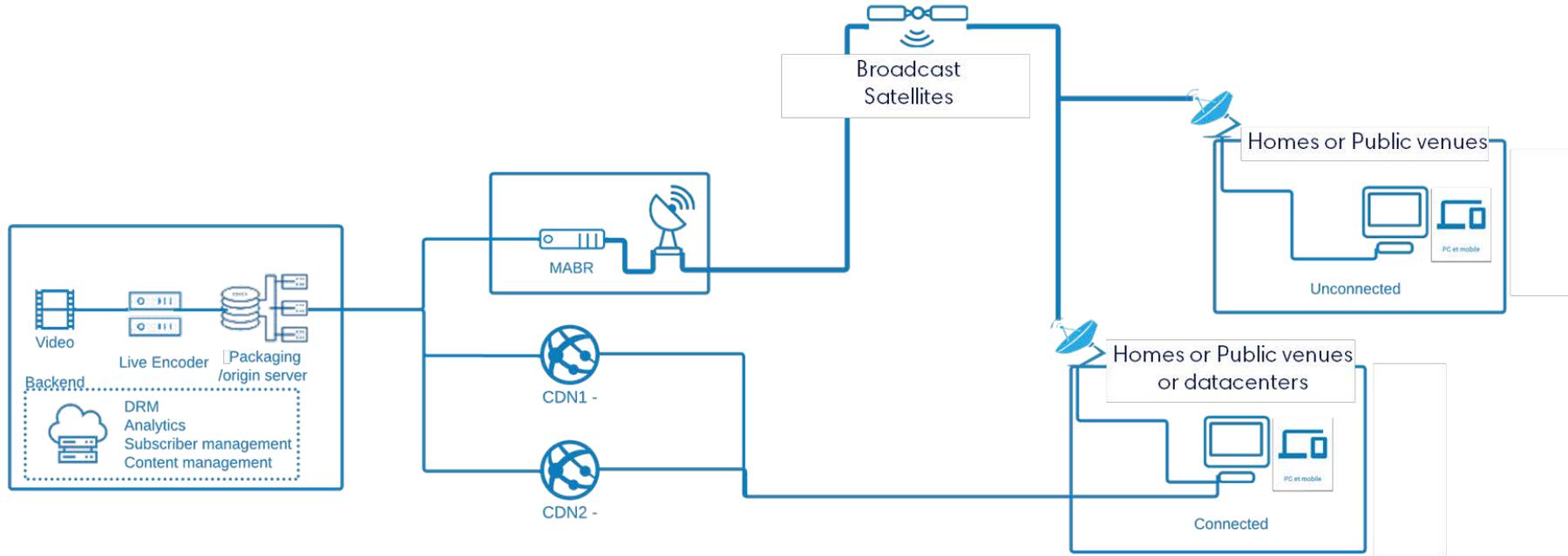
Native IP

DVB – HOME BROADCAST



DVB-NATIVE IP: SIMPLIFIED APPROACH TO CONTENT DISTRIBUTION

One single solution for broadcast and for over-the-top services



Technology Providers & Broadcasters

TPVISION

ateme

ST Engineering

EKT

BBC

tv

orange

viaccess-orca

EasyBroadcast

HUAWEI

Rai

ARD

kineton

ENENSYS
Technologies

Qualcomm

eurofins

broadpeak

Dolby
ATMOS

DTG
TESTING

Quadrille

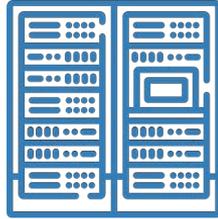
NATIVE IP SIMPLIFIED APPROACH TO CONTENT DISTRIBUTION

One single solution for B2B environment



Mobility

Enhance in-flight entertainment experience or bring live IP Native content to the cruise market



ISPs/Telcos/CDN

Leverage multicast capabilities and satellite coverage to feed live content into terrestrial distribution networks



Hotspot services

Provide live or VOD content to public Wi-Fi hotspots

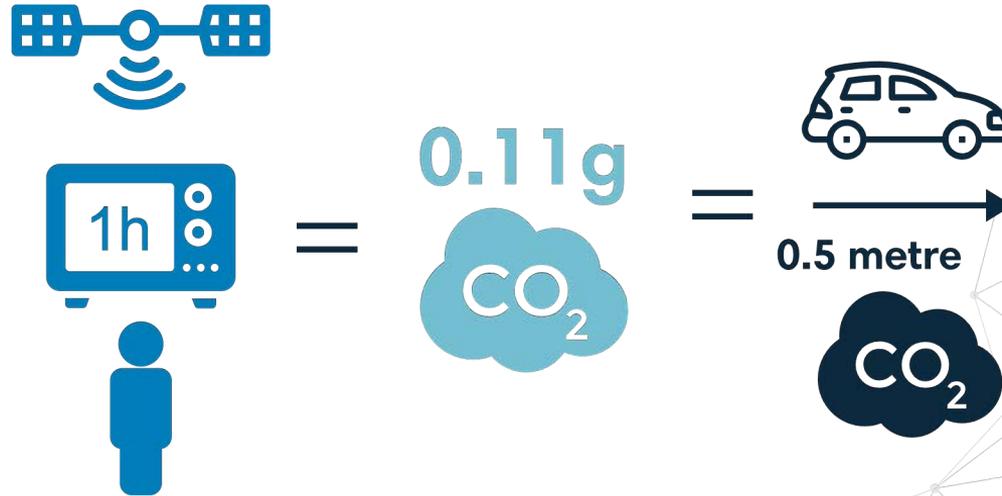


5G Video contribution

With the emergence of 5G as the next-gen. terrestrial broadcast network, satellite would be used to feed 5G base stations with live video services

SATELLITE DISTRIBUTION REMAINS THE “GREENEST” OPTION

An hour of video streaming via 4G is 1,200 times more carbon intensive than an hour of satellite TV



The carbon footprint of one hour of satellite TV broadcasting corresponds to the emission of 0.11g of CO₂, the equivalent of driving 0.5 m by car

COMBINING THE BEST OF BOTH WORLDS

Combining broadcast and OTT features

Consistent user-experience

- ▶ End-users can access the same service through multiple devices, at home and on-the-move

Service scalability at predictable costs

- ▶ IP multicast capabilities overcome OTT/unicast delivery challenges for premium live events (sports, news), while keeping CDN costs under control

Sustainability

- ▶ The power consumption to distribute content to all consumers is drastically lower in broadcast than terrestrial IP distribution

