

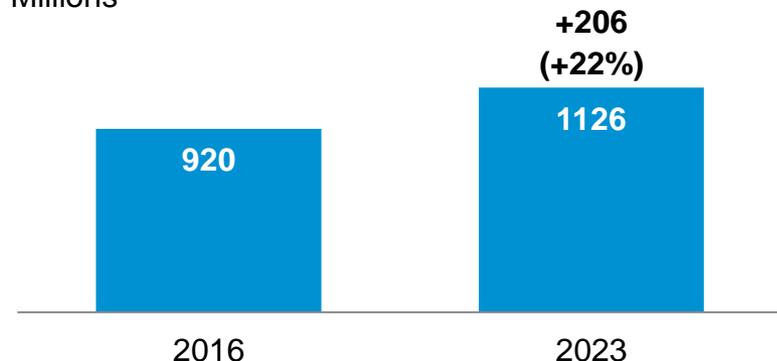
SES's growth markets: Video

Ferdinand Kayser, CCO

Strong growth potential from globalising SES's video business

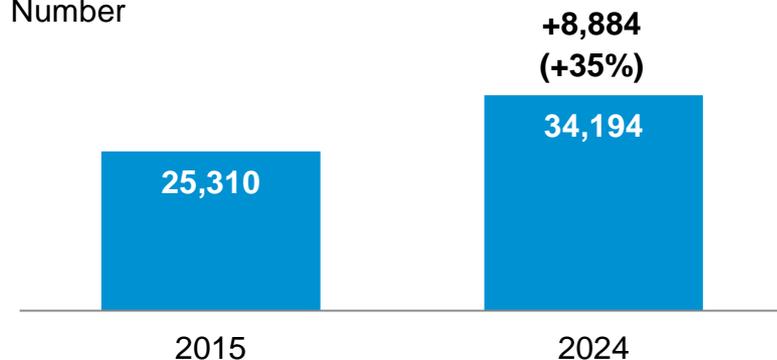
TV households in emerging markets⁽¹⁾

Millions



Satellite TV channels in emerging markets⁽²⁾

Number



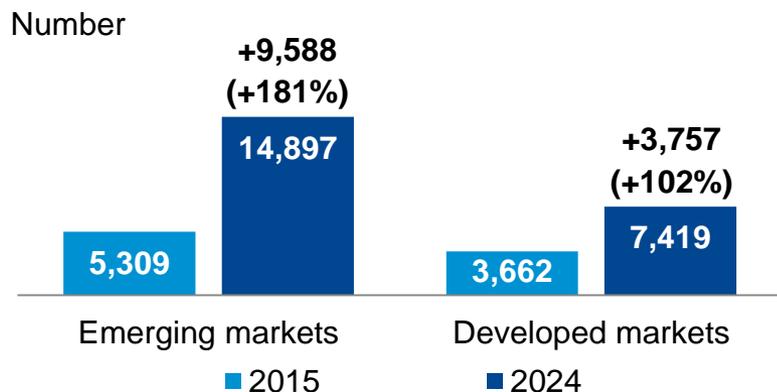
- ▲ Significant audience growth driving demand for new video platforms in emerging markets
- ▲ Growing audiences demanding more choice and more TV channels
- ▲ SES expanding in global video
 - Serving 76 million TV households in International
 - Broadcasting over 2,750 TV channels in International
 - 52% of SES's available capacity serving International markets (including SES-9)
 - Growing capacity in Latin America at established video neighbourhoods with anchor customers

1) Source: NSR

2) Source: Euroconsult

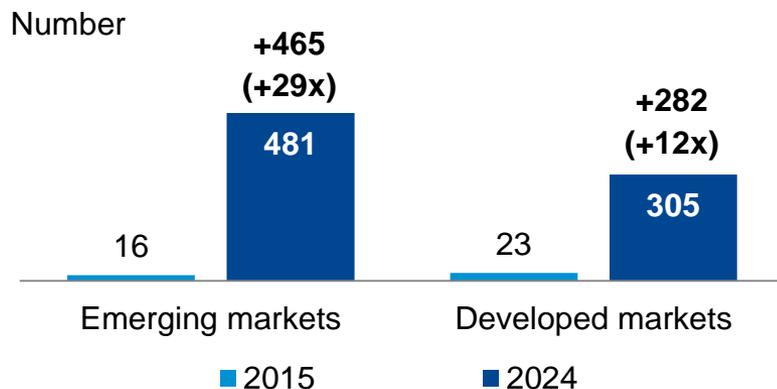
Driving growth from the transition to HD and Ultra HD

Global HDTV channels over satellite⁽¹⁾



- ▲ Increasing demand for higher quality viewing experience
 - TV screen sizes >49" represent the biggest growth segment⁽²⁾
- ▲ Higher quality signals require more capacity
 - Compression enhancements stimulating transition from SD to HD and UHD

Global UHD channels over satellite⁽¹⁾



- ▲ SES benefiting from transition to HD/UHD, and outperforming the industry
 - ~60% of all TV channels in MPEG-4
 - HDTV now 32.5% of all TV channels, compared to 19.8% for the rest of the industry

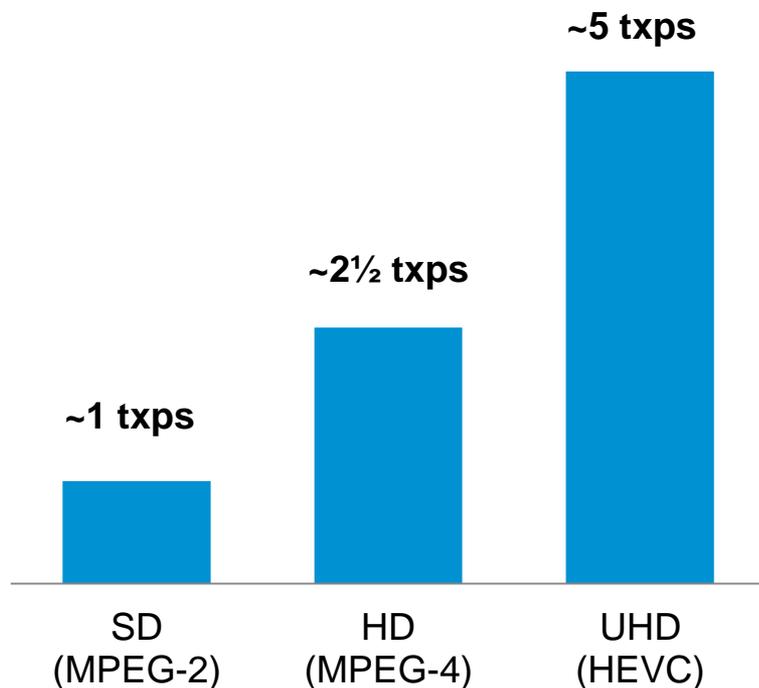
1) Source: Euroconsult

2) Source: IHS

Enabling higher quality content with compression

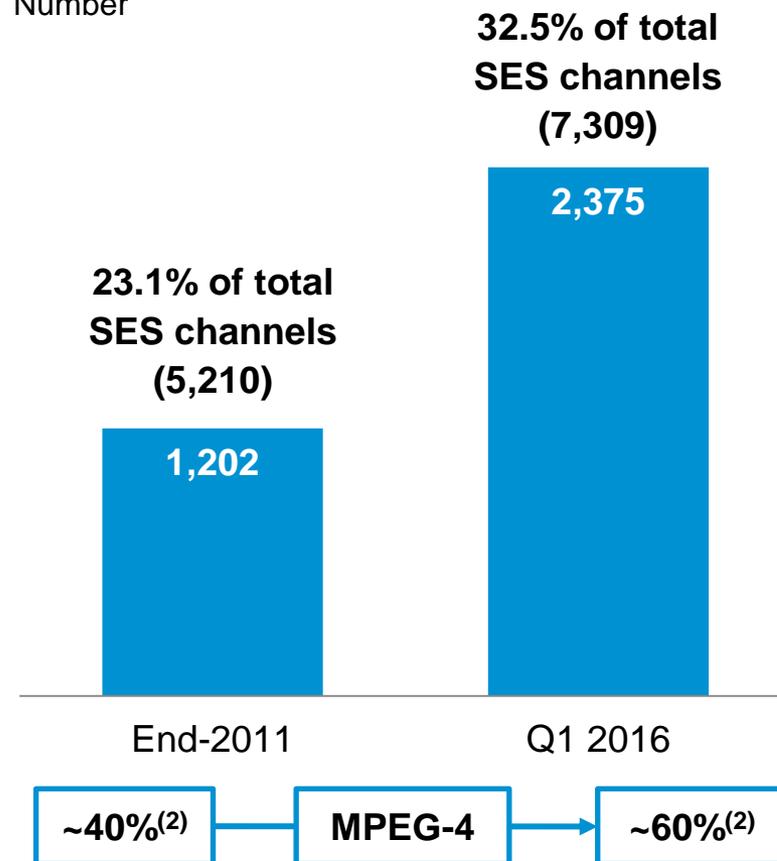
Higher signal quality requires more capacity⁽¹⁾

Transponders required to broadcast ten TV channels



HDTV channels broadcast by SES satellites

Number



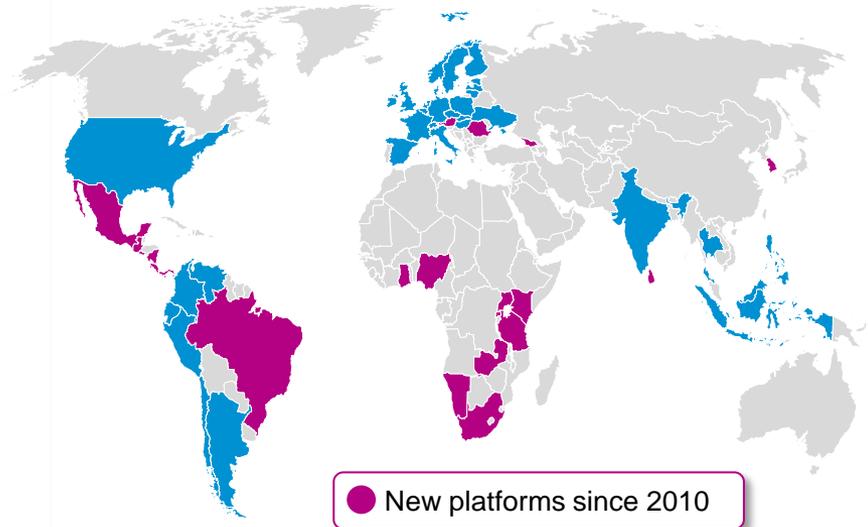
1) Based on one 36 MHz transponder delivering approximately 40 Mbit/s

2) MPEG-4 TV channels as a proportion of SES's total TV channels



Providing scalable, global solutions

50 pay-TV and FTA platforms



317 million households
(+61 million since 2011)

7,309 TV channels
(+44% since 2011)

32.5% HD penetration
(2011: 23.1%)

120 VoD platforms

Supporting over 500 broadcasters/operators





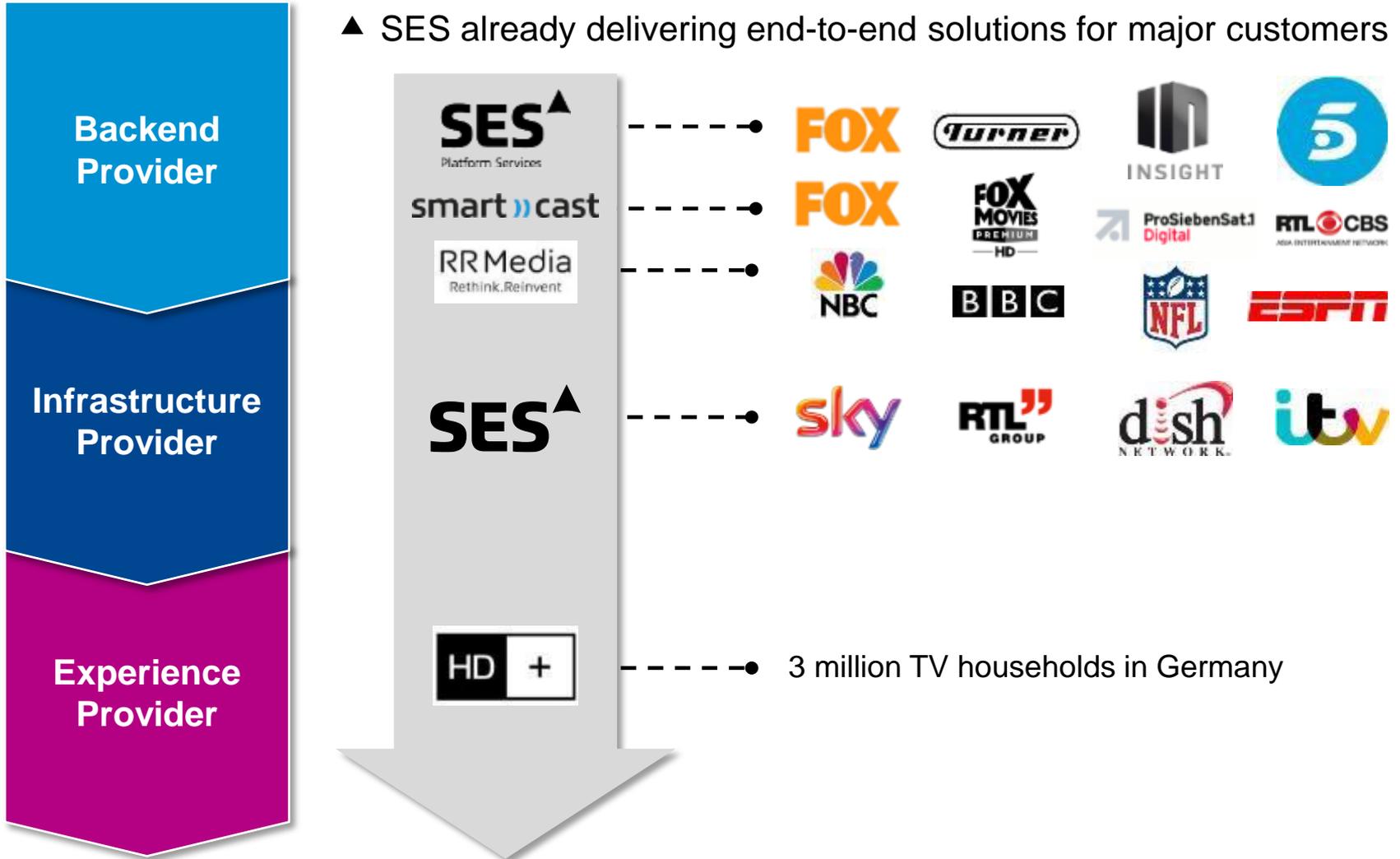
Scaling up SES's global video offering

	2011	2016
1 Liberalising the broadcast environment	256 million TV households	317 million TV households
2 Facilitating the digital switchover	5,210 TV channels	7,309 TV channels
3 Enabling the move to higher quality	23.1% HD penetration	32.5% HD penetration
4 Delivering holistic and hybrid solutions	0 VoD platform	120 VoD platforms
5 Replicating the SES way of working globally	▲ +23% available capacity in Asia-Pacific ▲ +15% available capacity in Latin America	



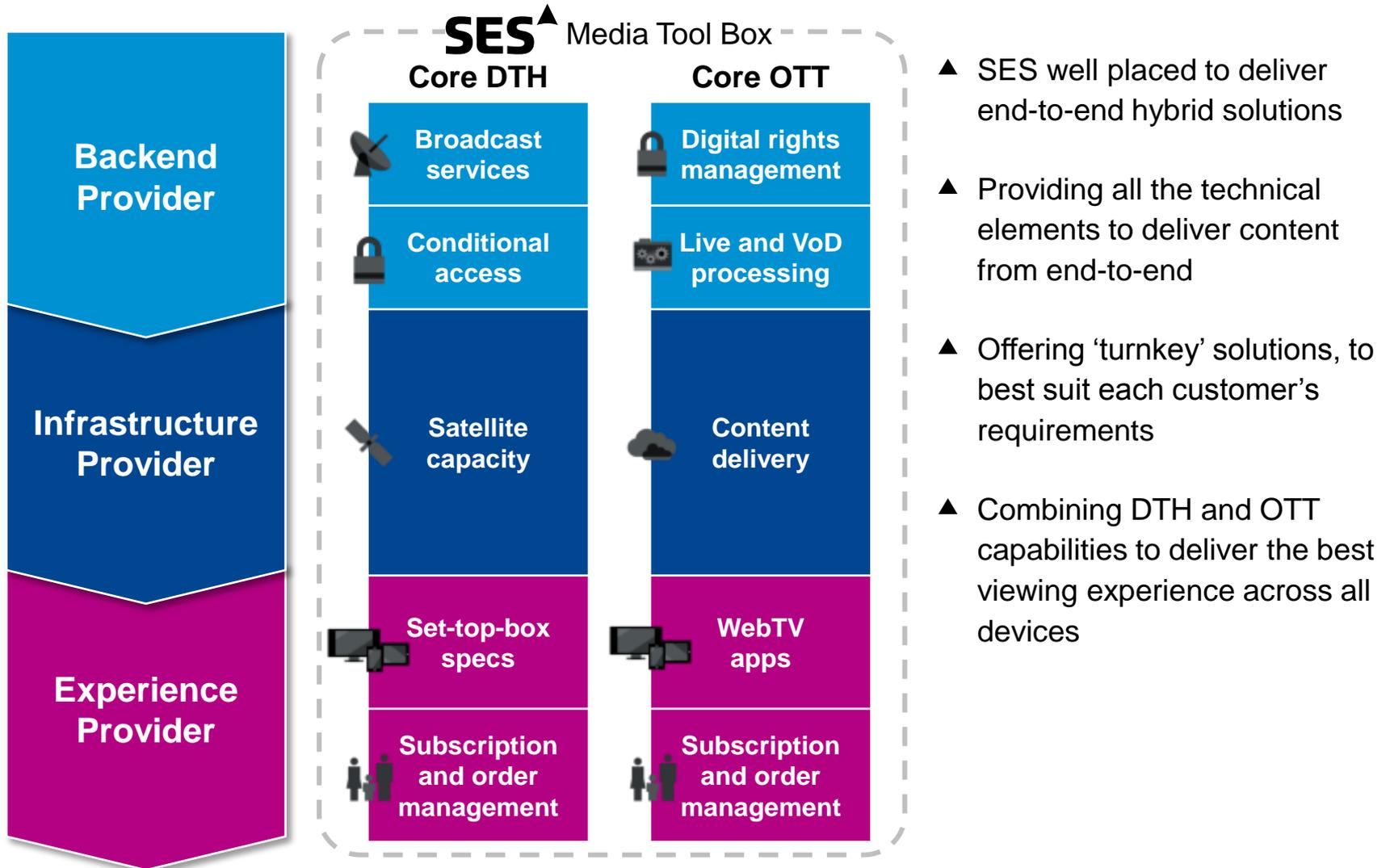
Delivering differentiated, holistic solutions

▲ SES already delivering end-to-end solutions for major customers





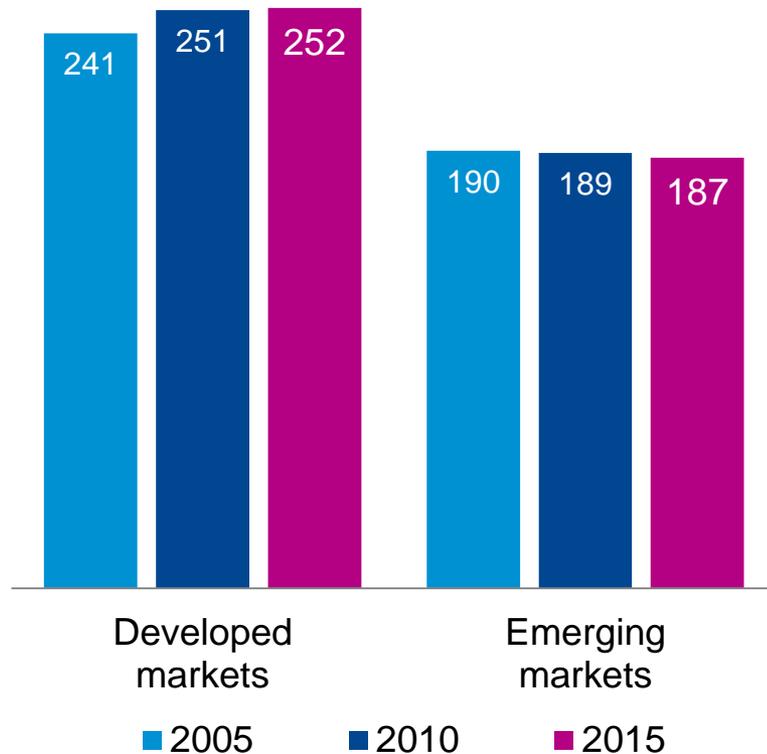
Offering scalable, linear/non-linear end-to-end solutions





Complementing satellite's competitive advantages

Average daily linear TV viewing times⁽¹⁾
Minutes



- ▲ Linear TV consumption remains stable
- ▲ Satellite delivers compelling advantages:
 - 100% global coverage
 - Consistent and high quality bandwidth
 - Highly cost-efficient delivery method
- ▲ Non-linear adding incremental viewing times, mostly during daytime
 - OTT increasingly substituting Blu-Ray/DVD
- ▲ Hybrid approach is essential

1) Source: Eurodata TV

Case studies: complementing satellite with OTT



Task

- ▲ Create a financially viable model for German FTA TV broadcasters to broadcast content in HD quality
- ▲ Extend to multi-screen distribution

Implementation

- ▲ Introduction of HD+ extrascreen, using SAT>IP technology
- ▲ Extending the reach of HD in Germany

Benefit

- ▲ Addressable market grown to **over 3 million HD+ homes**
- ▲ End consumers able to **watch** 21 encrypted HD and all FTA HD channels **on their mobile devices, using SAT>IP**



HOME:TV

Task

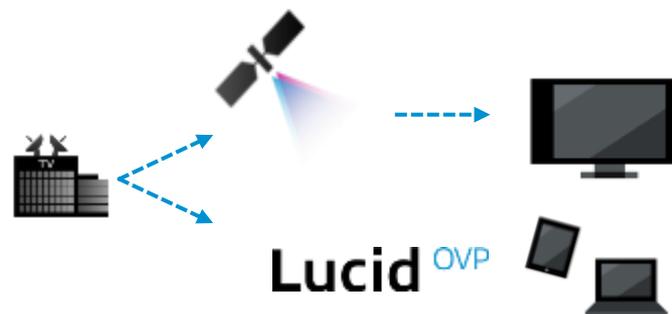
- ▲ Create a pan-European TV Broadcast and VoD platform for expatriates in Europe
- ▲ Implement complete end-to-end distribution on DTH and OTT

Implementation

- ▲ Content contribution, back-end services and distribution via satellite and Content Delivery Network
- ▲ Provide OTT reception via iOS, Android and Webplayer

Benefit

- ▲ End consumers have **choice to select DTH and/or OTT**
- ▲ Based on **LUCID OVP** to enable reception on **all common IP devices**, in addition to the main TV screen





Shaping the future by innovating at all levels



Space

- ▲ Expanding in fast-growing emerging markets
- ▲ SES-9 (Asia)/SES-10 (Latin America): +80 txps

Platform

- ▲ Developing new DTH platforms (e.g. West Africa)
- ▲  grown to 1.9 million paying subscribers⁽¹⁾

Application

- ▲ Anytime, anywhere and any screen
- ▲ Orchestrating opportunities with SES's Industry Days



Ground

SAT > IP[™]

Lucid OVP

 **Fluid HUB**
 **Solid LIVE**

1) Excluding 1.2 million households currently within the six months free introductory period

Accelerating SES's future-proof differentiation

Three key principles:

Distinct infrastructure to holistic solution

- ▲ Prime neighbourhoods and substantial technical reach
- ▲ Complemented by world-leading media solutions provision
- ▲ Rapidly scaling up SES's capabilities globally

Yield management to value management

- ▲ Complementing infrastructure sales with services
- ▲ 50% increase in "pull-through" from SES PS since 2012



Relevance to resilience

- ▲ Orchestrating the transition to HD and UHD
- ▲ Complementing satellite with terrestrial capabilities
- ▲ Delivering the best experience across all devices

Becoming the first choice for delivery of global video content

- ▲ Growing SES's prime neighbourhoods and substantial technical reach
- ▲ Enhancing SES's hybrid capabilities and ancillary services globally

