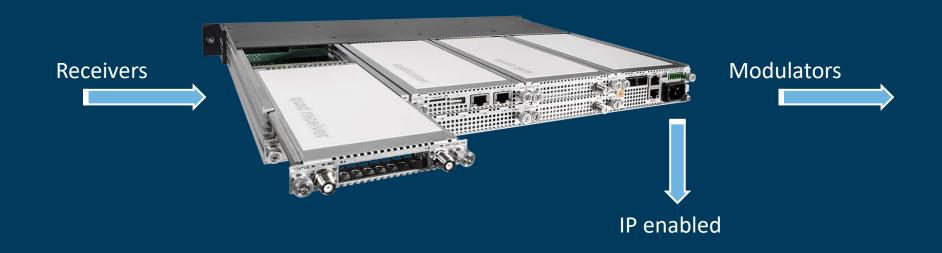


Teleste Luminato 2018

1



Luminato – Left to right





Luminato – Fact of the day

8500

Teleste Proprietary. All rights reserved.



Luminato Receivers

- No more traditional reception specific receivers
- Multistandard receivers
 - LRM-A
 - LRM-B
- Quad and Dual receivers
- IP reception included in Quad receiver
- Simultaneous reception of e.g. DVB-S2X and DVB-T2





Luminato key benefit - Encryption

Simulcrypt up to four CAS simultaneous

IPTV encryption (AES)

Enhanced security with scrambling on the receivers

Samsung LynkDRM and LG Pro:idiom hospitality DRMs





Luminato Dense Modulator

LDM-A



Teleste Proprietary. All rights reserved.



Luminato Dense Modulator – Hard figures

Totally new design

Compatible with existing chassis (LCH-D)

16 / 24 QAMs per module

Flexible channel selection

Max 3 modules within existing chassis LCH-D



Luminato Dense Modulator – Soft figures

QAMs added with licenses

First samples available by end of 2017

Launched in GPL H1/2018

General availability end of Q1/2018

Next phases will include Dense COFDM modulator

Existing DVB-C modulator will remain available



Luminato Edge QAM

Dense modulator enables totally new density per module

Dataminer integration existing for umbrella monitoring and configuration

New Chassis will enable highest QAM density per 1RU



Luminato Chassis – Version 2.0 on drawing table

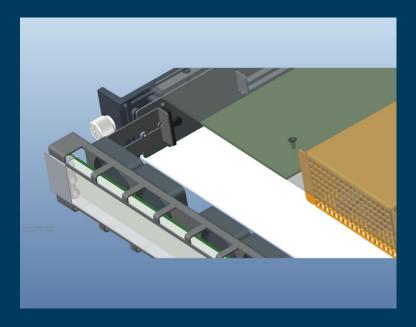
Six module slots

Interface card variable (1Gb ports vs. 10Gb ports)

Power supply on front side

Compliant with old modules

Available "late" 2018





Luminato – Future compliancy is here

Transparent to codecs like HEVC

Transparent to resolutions like 4K

Support of DVB-S2X reception



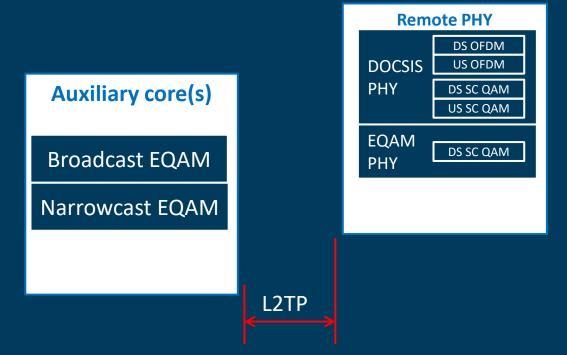
H.265 - HIGH EFFICIENCY VIDEO CODING



Luminato roadmap snapshot – DVB Video Core

Luminato acting as auxiliary core for:

- Broadcast video
- narrowcast video
 Features:
 - L2TP tunneling for pseudowires
 - 1588 clock





CMAF CENC JITP



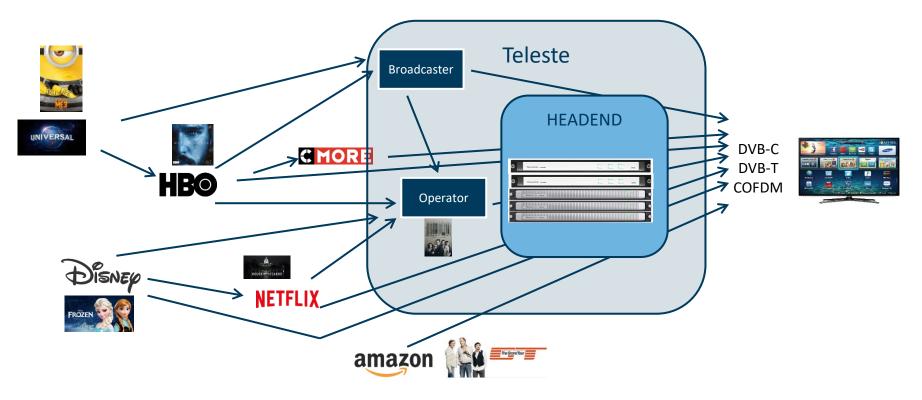
4K HDR

HEVC

13



Video is everywhere







Reception

Multiplexing Scrambling

Encoding

Offline transcoding

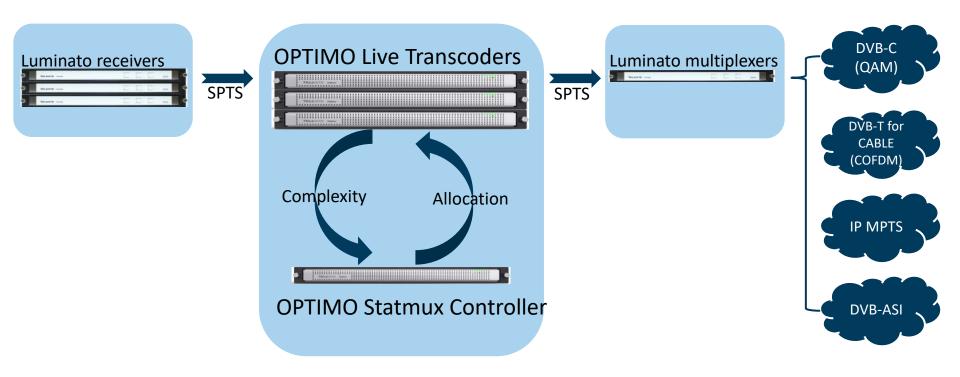
Packetizing

Statmuxing



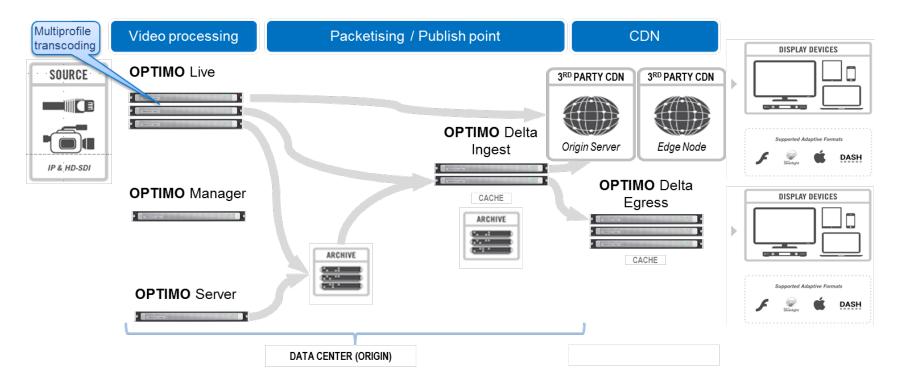


Optimo Statmux Architecture





Video Delivery Pipeline - Architecture for OTT customer





Video – Size matters

FULL HD TV (1,920x1,080)		CLEATED (2) COLOR	
HD TV (1,280x720)	E CAN	Activity	Typical bandwidth required
		Music streaming	1.5 Mbps (CD quality) 250 Kbps (MPS)
		Video streaming – standard quality	1.5 Mbps per user (minimum)
PALTV (SD) 720x576		HD video streaming	5 Mbps per user
		Streaming video services, such as Netflix, YouTube, HBO Go	Up to 10.5 Mbps per user (HD or 1080p streams)
		4K ultra HD or HDR video streaming	25 Mbps per user

Teleste Proprietary. All rights reserved.