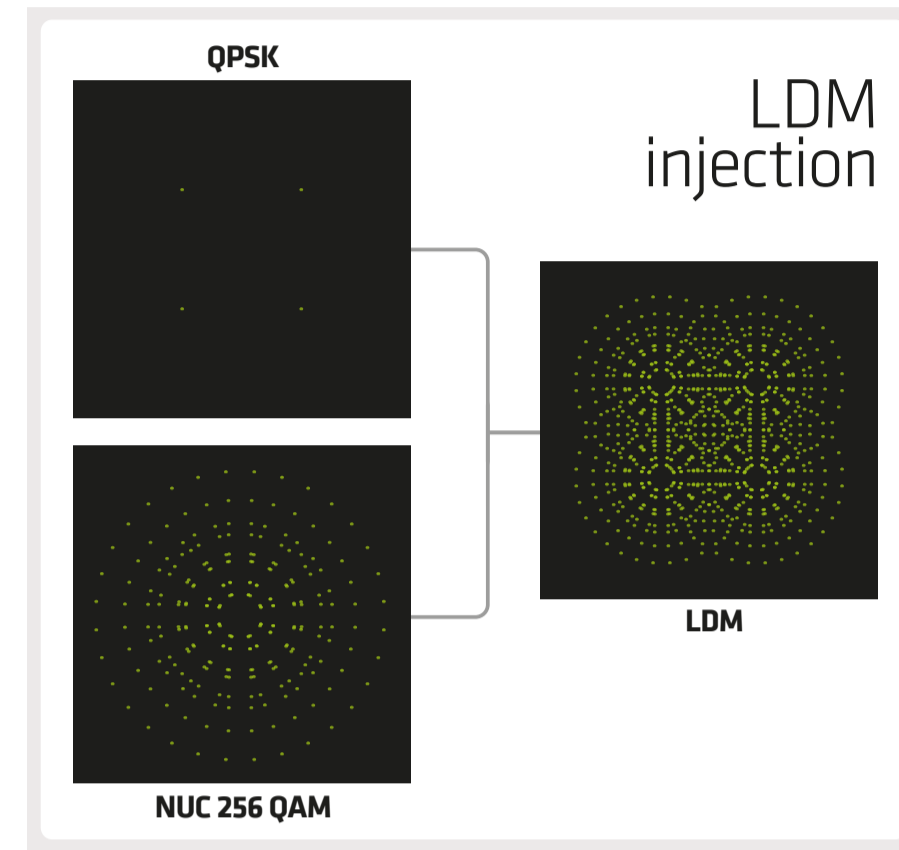


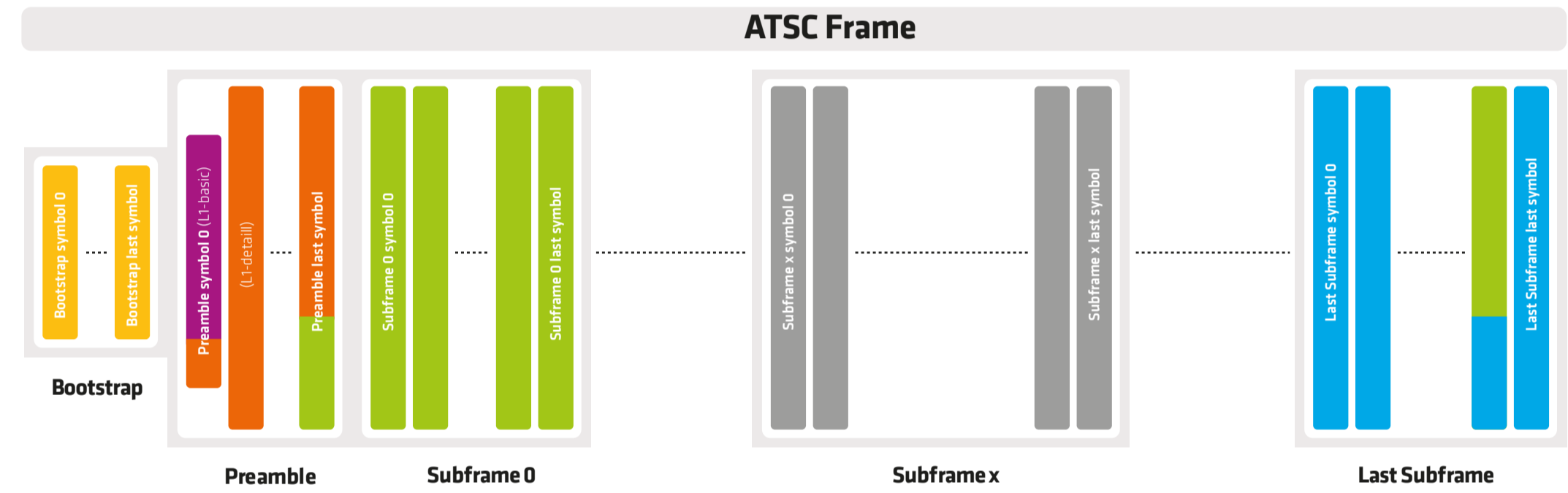
Air interface

Physical overview

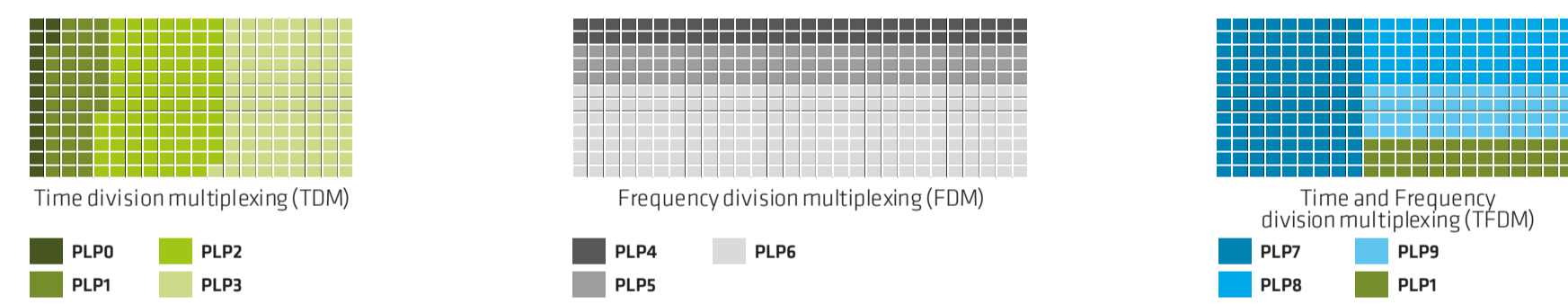
FEC length	16200; 64800
FEC code	BCH; CRC + LDPC
Code Rate	2/15; 3/15; 4/15; 5/15; 6/15; 7/15; 8/15; 9/15; 10/15; 11/15; 12/15; 13/15
Constellation	QPSK ; NUC 16QAM, 64QAM, 256QAM, 1024QAM, 4096QAM
Transmission mode	SISO, MISO, MIMO, Channel bonding
Interleaving	Convolutional Time Interleaver; Hybrid Time Interleaver
FFT size	8K; 16K; 32K
Bitrate Max	8Mhz: 78,5Mbps (SISO) - 157Mbps (2x2 MIMO) 6Mhz: 58,8Mbps (SISO) - 117Mbps (2x2 MIMO) from 50ms to 5s
ATSC 3.0 frame duration	from 1 up to 64 (min 4 in parallel for demod)
PLP number	
Versatile PLP mapping	TDM, FDM, TFDM, LDM, LTDM



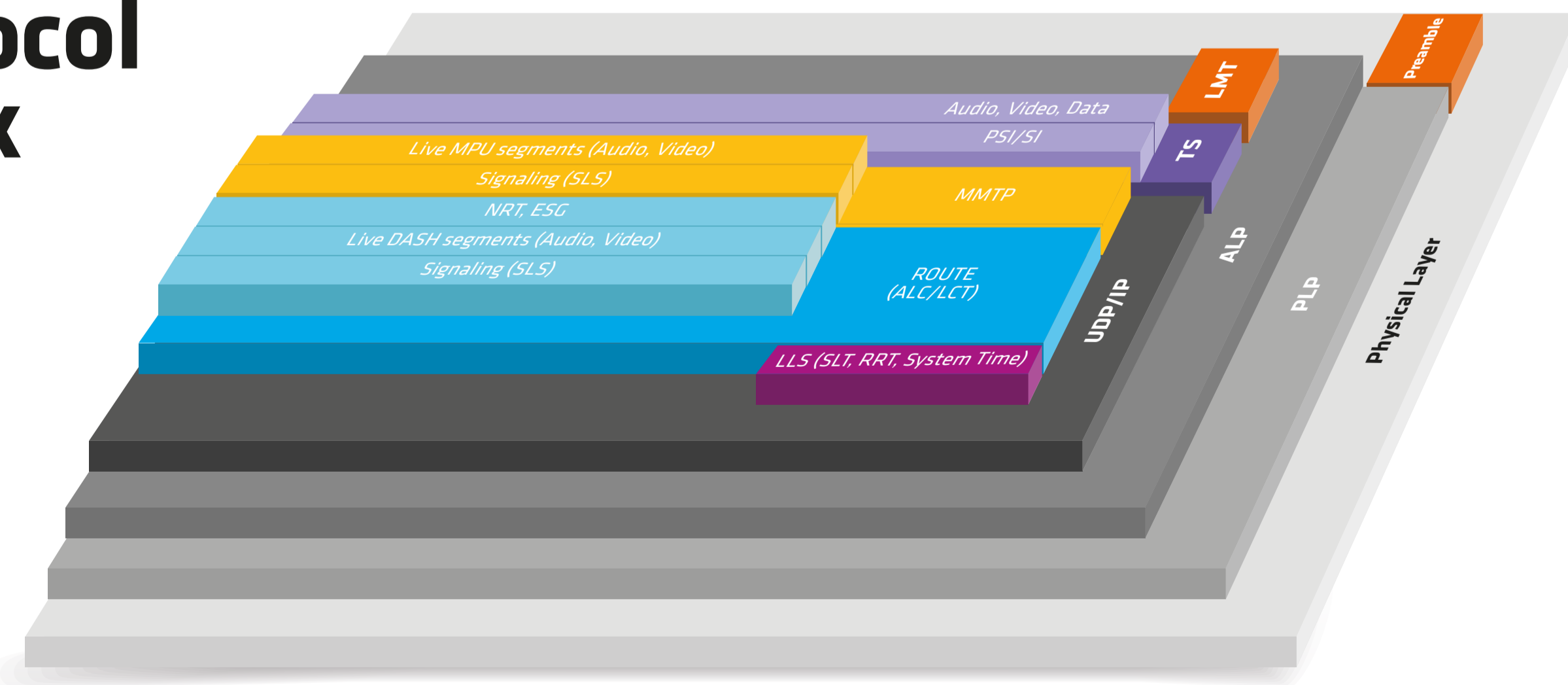
Framing



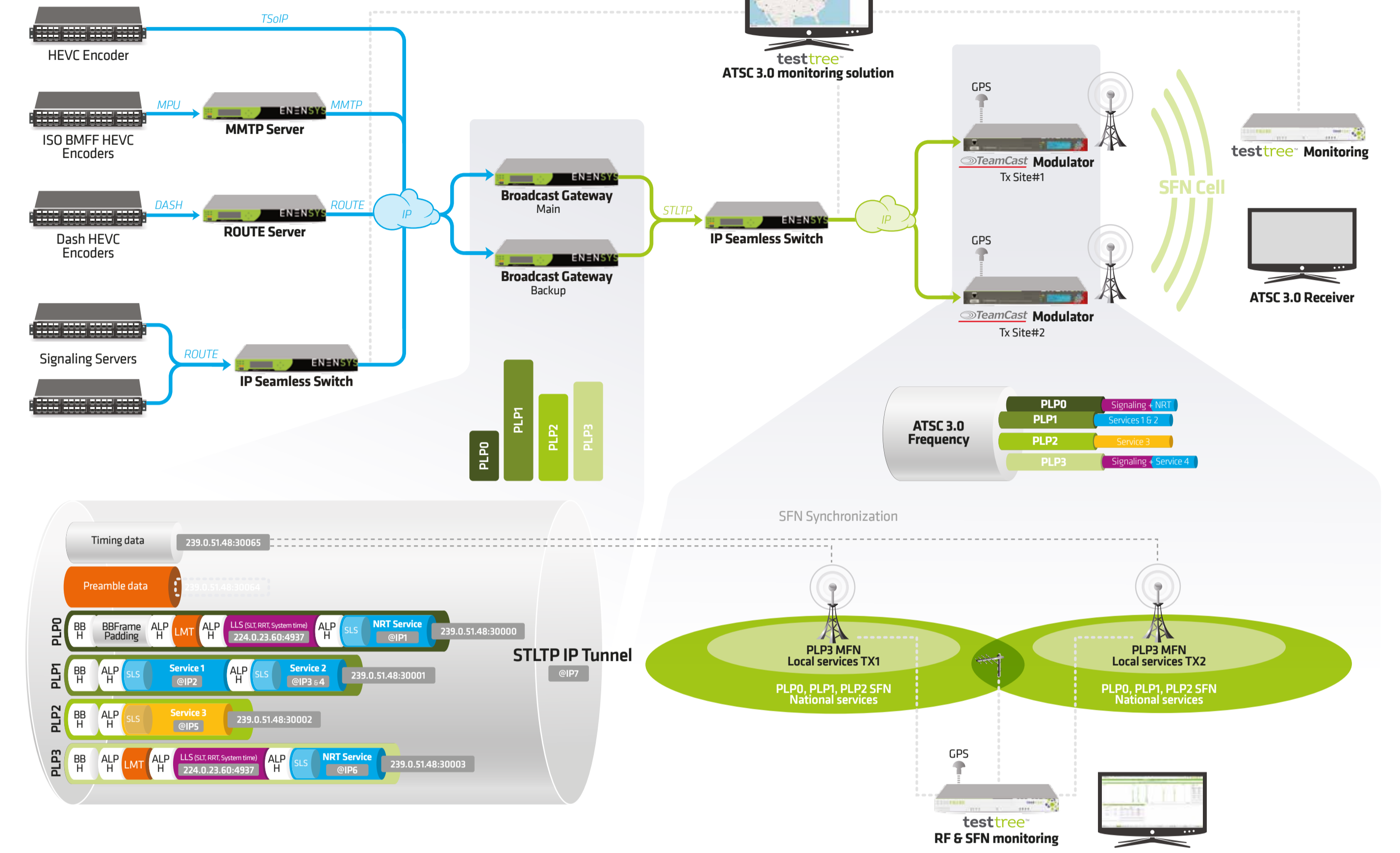
PLP Mapping



Protocol Stack



Architecture



GLOSSARY

ALP	ATSC Link layer Protocol
BB	Base Band Frame
DASH	Dynamic Adaptive Streaming over HTTP
ISO BMFF	ISO Base Media File Format
LDM	Layered Division Multiplexing
LMT	Link Mapping Table
LLS	Low Layer Signalling
MMT	MPEG Media Transport
MMTP	MPEG Media Transport Protocol
MPU	Media Processing Unit
NRT	Non Real Time
NUC	Non-Uniform Constellation
PLP	Physical Layer Pipe
ROUTE	Real-Time Object Delivery over Unidirectional Transport
RRT	Rating Region Table
SLS	Service Layer Signalling
SLT	Service List Table
STLTP	Studio to Transmitter Link Transport protocol
TDM	Time Division Multiplexing
TS	Transport Stream

Service Acquisition

