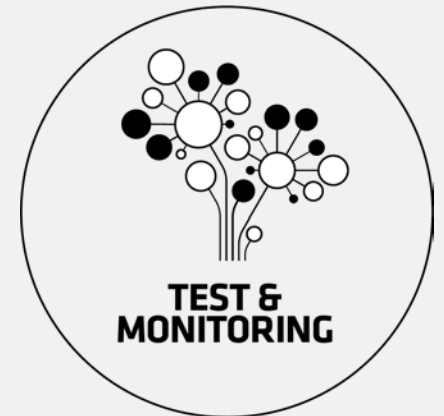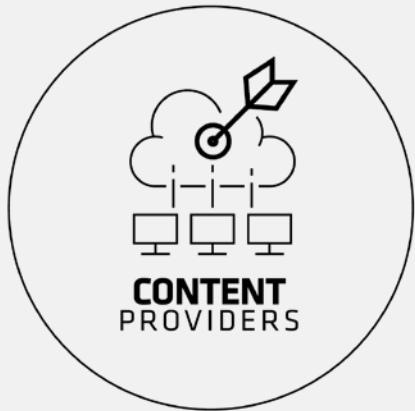# ENENSYS
Technologies

Going 3.0

A short story of a PBS transition towards NextGen TV

One group, 5 markets

A customer oriented organization

- Group established 17 years ago in Rennes, France
  - Cradle of OFDM, MPEG, …
  - Strong Academic support

- 80 people / 50 engineers

- Revenue 2021: 15 Millions US$

ENENSYS
Technologies

ENENSYS, worldwide presence

RENNES
PARIS
R&D

MOSCOW

SEOUL — TOKYO

HONG-KONG

BANGKOK

TAMPA
Regional Office

MEXICO

JOHANNESBURG

Majors Digital TV players
worldwide are using ENENSYS
equipment & software

Worldwide presence with
an export rate of 90%
> 400 customers
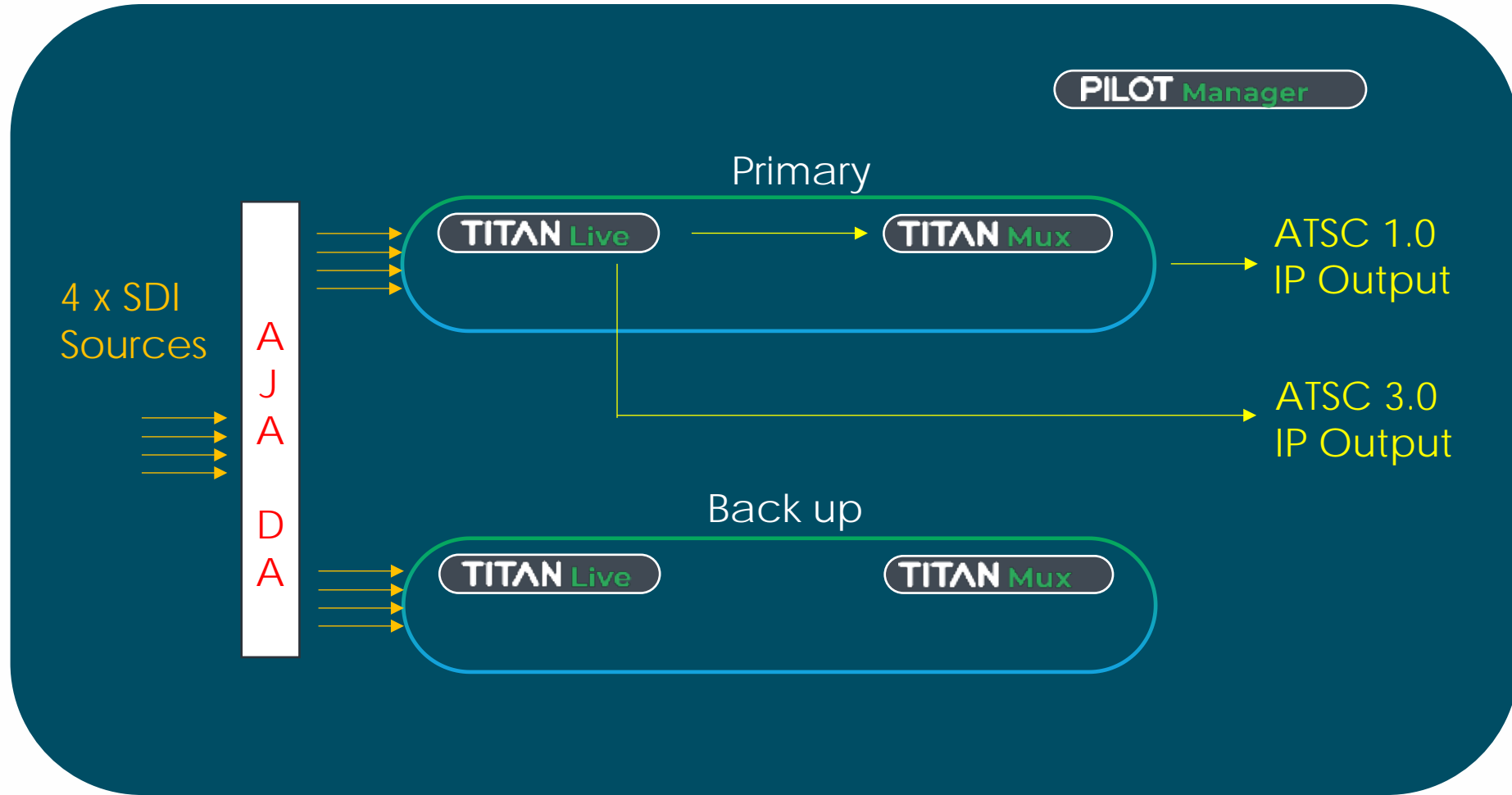> 60 countries

IOWA PBS use case

Scope of IOWA transition

Resilience Now

/ End of life transmitters

/ End of life encoder
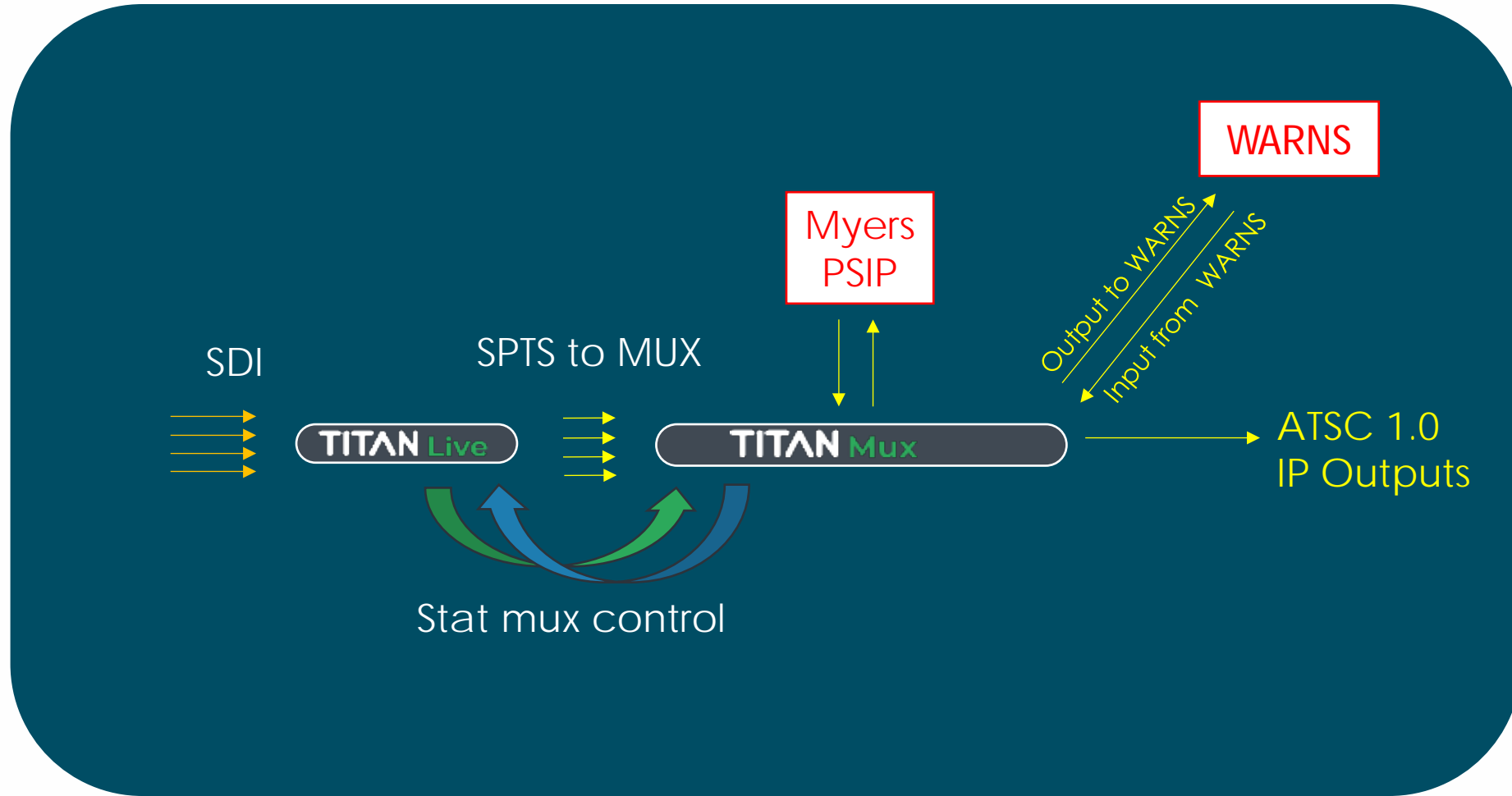
/ Better Monitoring

   (QoE/QoS)

/ Redundancy

Future Proof

/ NextGenTV Encoder

/ NextGenTV Distribution

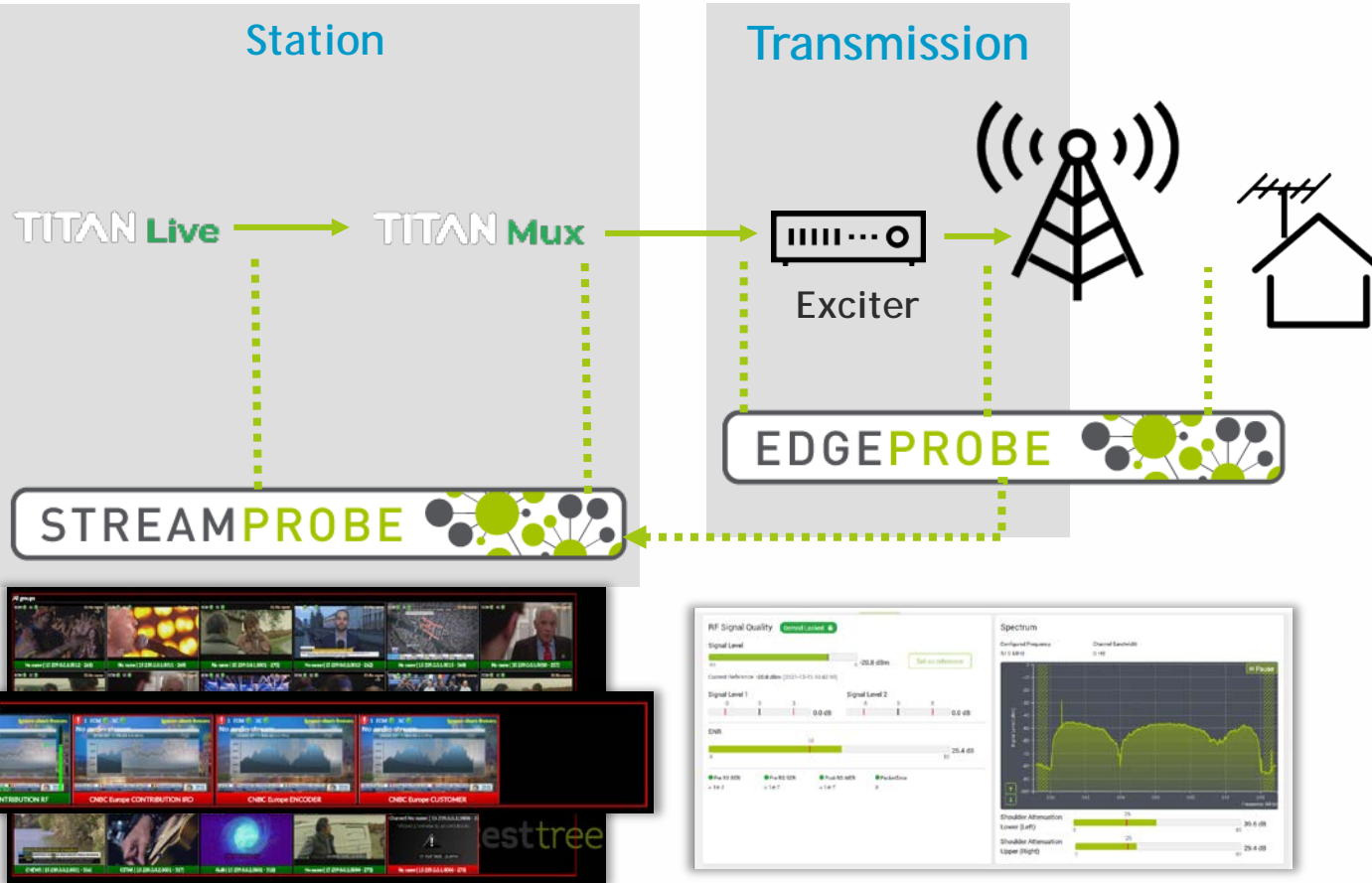/ NextGenTV Exciter

/ NextGentTV Monitoring

Encoder Redundancy

Encoder workflow

# Service Quality from Studio down to Transmission: 24/7 monitoring

QoS

- ✓ Off-air signal Quality
- ✓ TX stability
- ✓ Exciter input & transport quality

QoE

- ✓ Content Audio & Video quality
- ✓ Live video playback
- ✓ Compliancy / on-error recording
- ✓ Thumbnail Mosaic view @ MCR

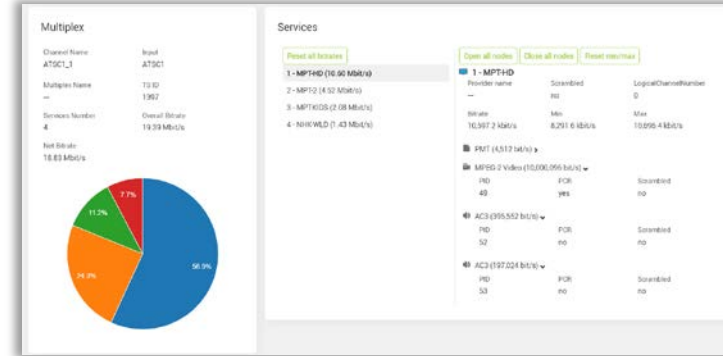# Service Quality from Studio down to Transmission: 24/7 monitoring

Overall TX & Off-air Quality View

Broadcast NW Quality Reports

Alerting SMS & email
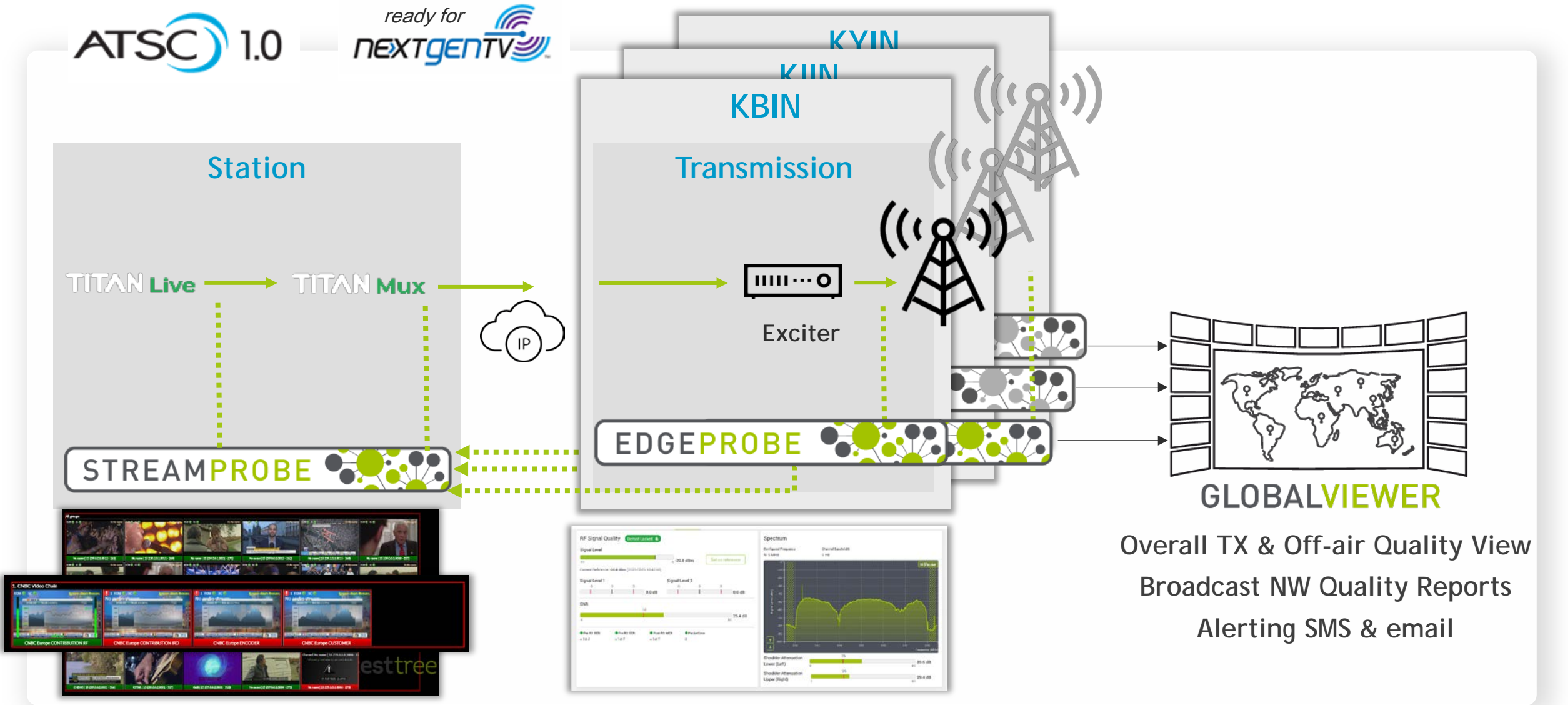
Broadcast Transport & Transmission Quality

EdgeProbe & GlobalViewer

RF Signal Quality
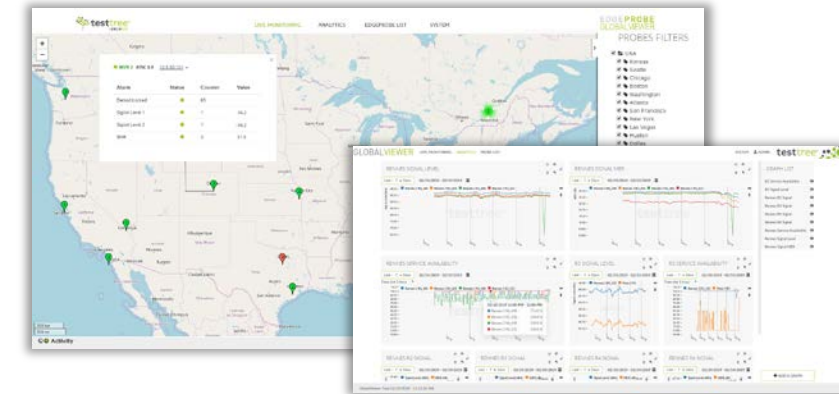

STB Decoding assurance
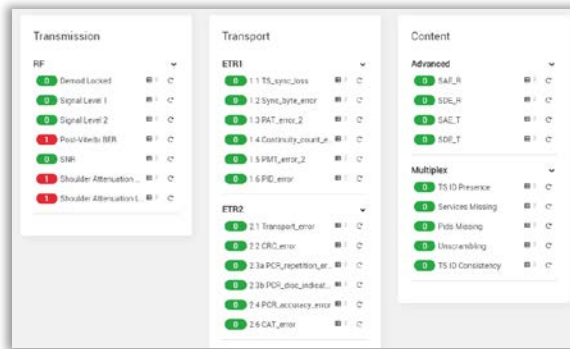
QoS alarming
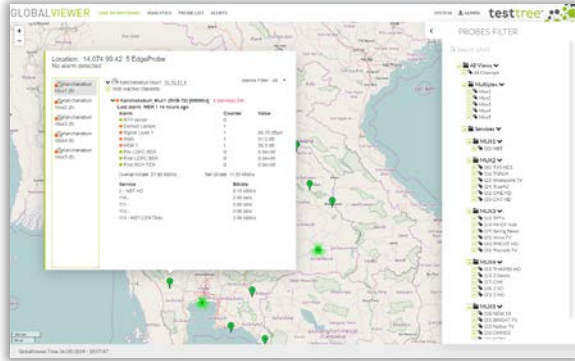ETSI TR 101 290
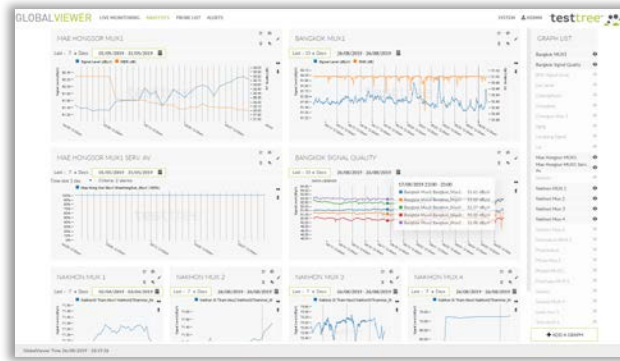Broadcast Signalling

EDGEPROBE

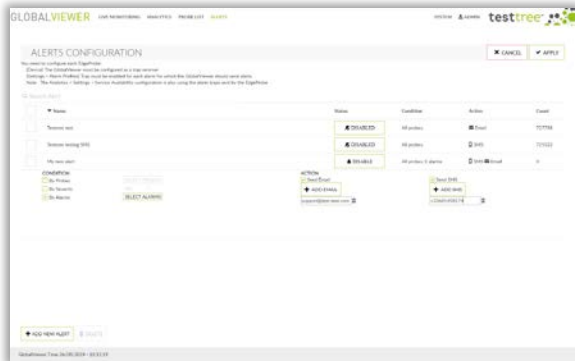**Centralized Network QoS & Report Generation**

Ensuring DTTV Service Quality

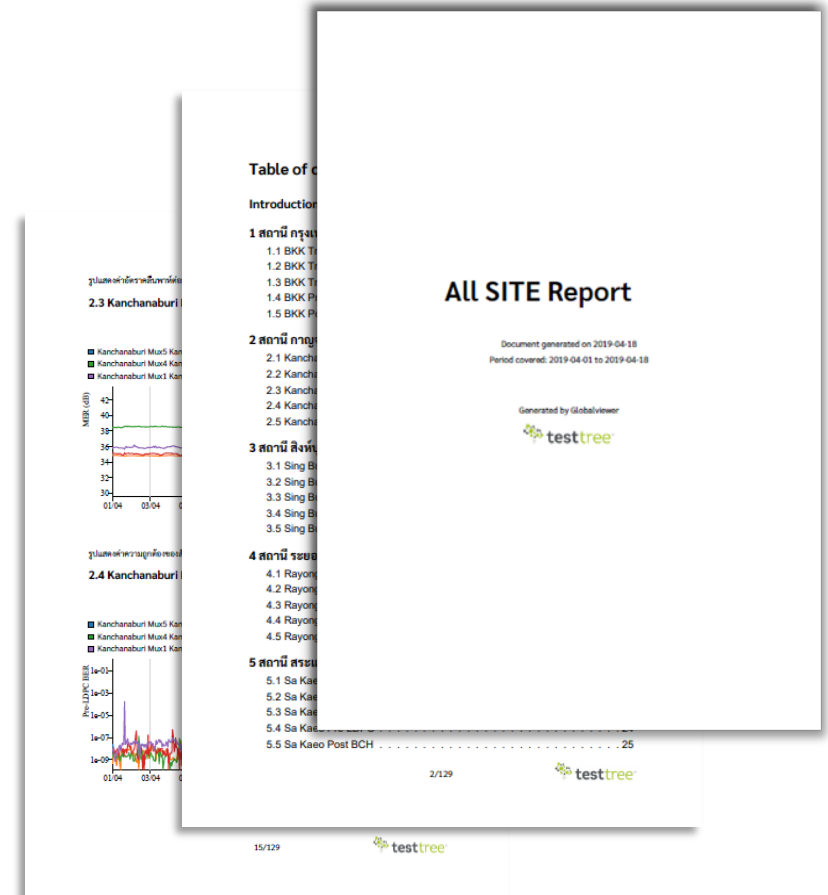## Centralize the Network & Service Quality view

Centralized Supervision
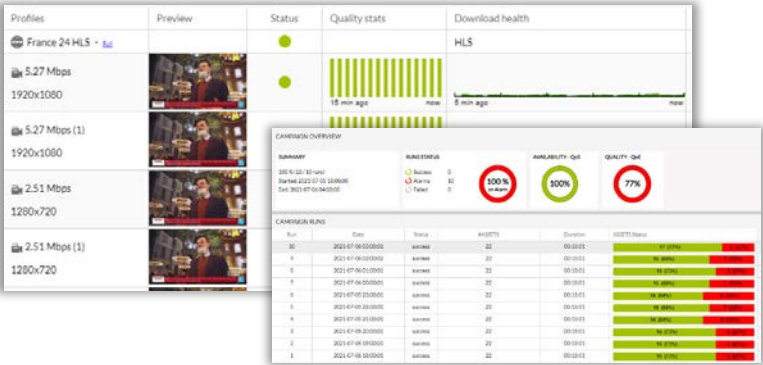

Real-time Dashboard

SMS/email Alerts

GLOBALVIEWER
For **EDGEPROBE**

Reporting: automatic PDF

Content QoE & QoS

StreamProbe

QoS ABR Integrity
Manifest & all Profiles
Live & VOD Library

QoS TS Integrity
ETR 101 290
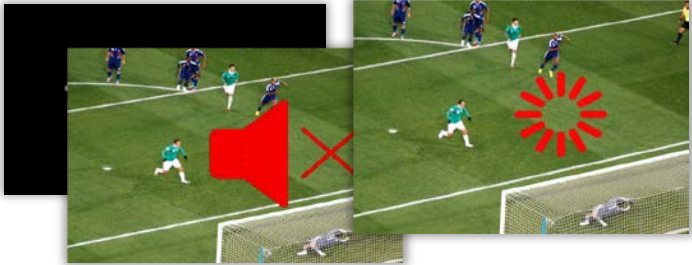
QoE Audio & Video Quality
Freeze, Black, Silence, Subtitles…
Encoded OR uncompressed ST 2110, ST 2022-6
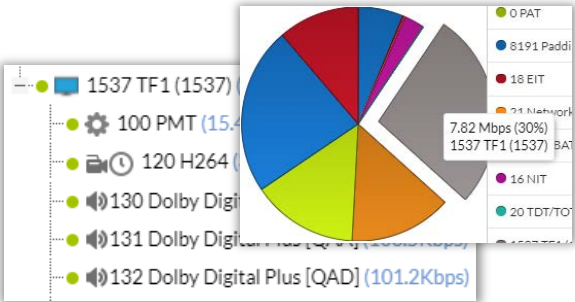

FULLY VIRTUALIZED **COTS** **STREAMPROBE**
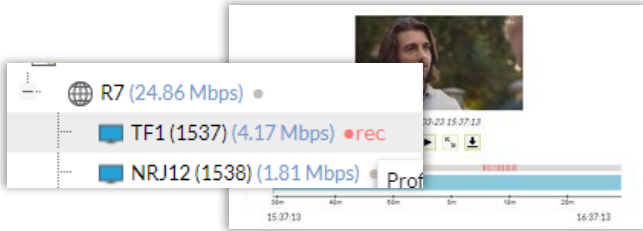
Stream Recording
Compliancy, on-error…

Ad Insertion quality
SCTE-35 Integrity, splice point QoE
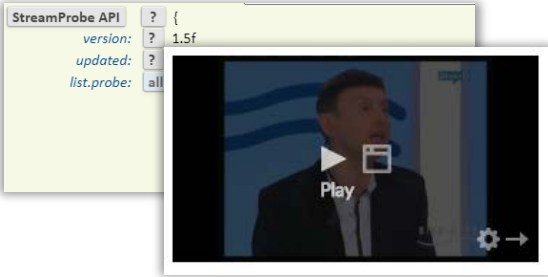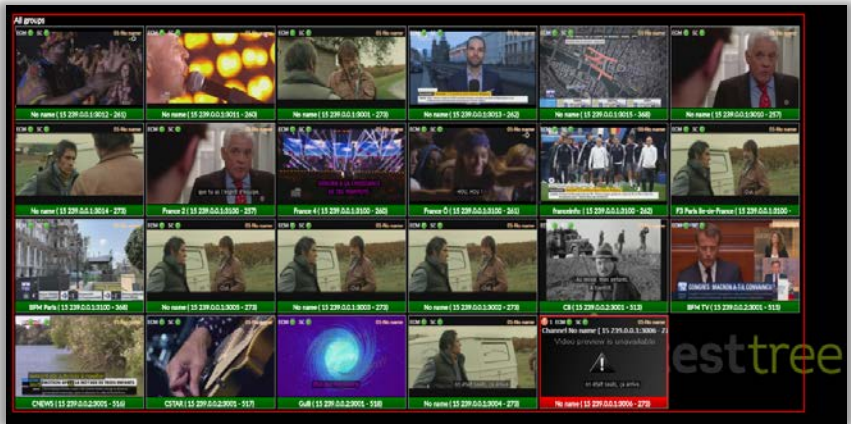
Supervision NBI
SNMP, HTTP API, Video Streaming Proxy

ENENSYS Technologies

ATSC 3.0 Physical Layer

/ **Increase coverage or throughput**

/ **Enables higher channel usage efficiency**

/ **Open new use cases**

ENENSYS
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Thanks

ENENSYS TECHNOLOGIES
4A rue des Buttes
CS 37734
35 577 Cesson-Sévigné – France
Phone (+33) 1 70 72 51 70
Email contact@enensys.com

www.enensys.com