



OneBEAM

Share satellite capacity for DTT distribution and DTH services


ONEBEAM IS THE ENENSYS SOLUTION TO REDUCE SATELLITE OPEX COSTS BY DELIVERING DIRECT TO HOME (DTH) TV AND DIGITAL TERRESTRIAL TV (DTT) DISTRIBUTION OVER ONE OR SEVERAL SATELLITE FEEDS.

FEATURES

- No duplication of content over satellite
- DVB-T/T2 multiplex generation from DTH source
- Selection of DTH services to build the DTT multiplex
- Service selection from one or two DTH feeds
- Regionalization support
- Single PLP and multiple PLP support (DVB-T2)
- Deterministic generation for SFN broadcasting
- PSI/SI update to match with new DTT multiplex
- Video-based Emergency Warning System (EWS)



APPLICATIONS

- Use existing DTH services to deploy DTT
- Backup DTT transmission sites with DTH stream
- Simultaneous FTA DTT and Pay TV DTH services
- Covering DTT 'black spots' with DTH services
- Regionalization support with Dual inputs
- Emergency Warning System 

BENEFITS

- Bandwidth optimization to reduce annual OPEX
- Very fast Return On Investment (ROI)
- Full support of DTH, DVB-T and DVB-T2 standards
- Reuse existing network equipment
- One-click button to switch from DVB-T to T2
- DVB-T and DVB-T2 transmitter agnostic
- Solution widely deployed
- DVB-SIS standard compliant to avoid vendor locking
- OptiBeam© support to optimize SI bandwidth



DO YOU REALLY NEED TWO?

Use a **Single** satellite feed for DTH delivery and DTT distribution



The unique end-to-end solution to build DTT multiplexes from DTH stream

1 Control Stream Generator

SmartGate OneBeam™

- Control at once your DTT network
- Remote control of every TxEdge
- Transparent for DTH receivers
- Manage Up to 20x Regions and more
- F&TI and DSACI (metadata) generation
- Service and SI management
- Broadcast-grade product

2 1+1 SmartGate Synchronisation

TxGuard™

- Patented 1+1 redundancy mechanism
- Enable SFN seamless redundancy
- No TV blackout during switch-over operation
- Seamless operation of SmartGate:
 - Guaranteed MegaFrame synchronization
 - Guaranteed Metadata synchronization

8 Satellite Modulator

Vyper™

- DVB-S/S2/S2X Satellite Modulator
- High RF Quality to increase your payload
- Flexible input/output interfaces
- Excellent signal shoulder levels to increase the number of carriers per transponder
- BISS1 and BISS2-0/1/2/CA scrambling

4 Seamless IP switch

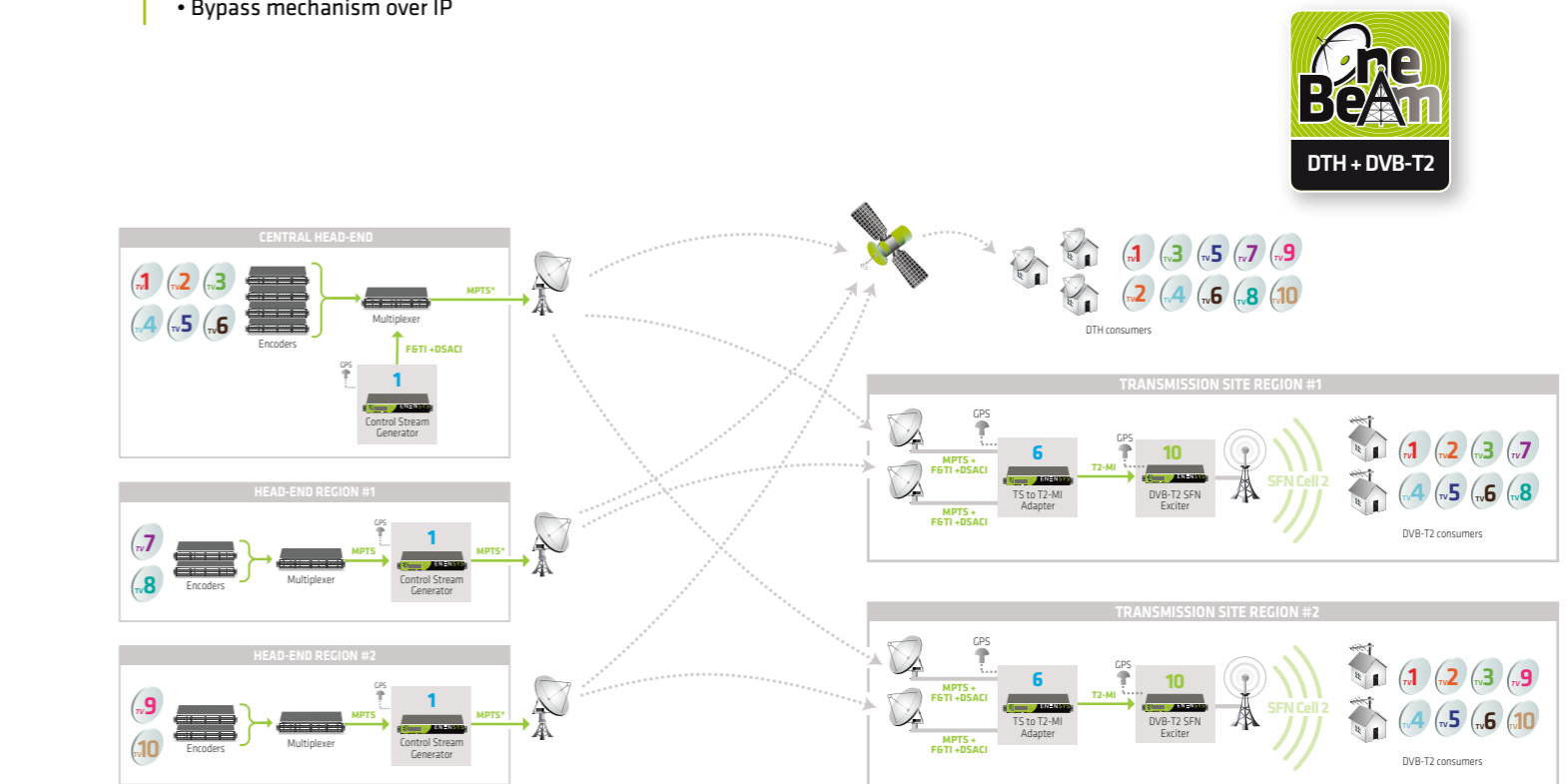
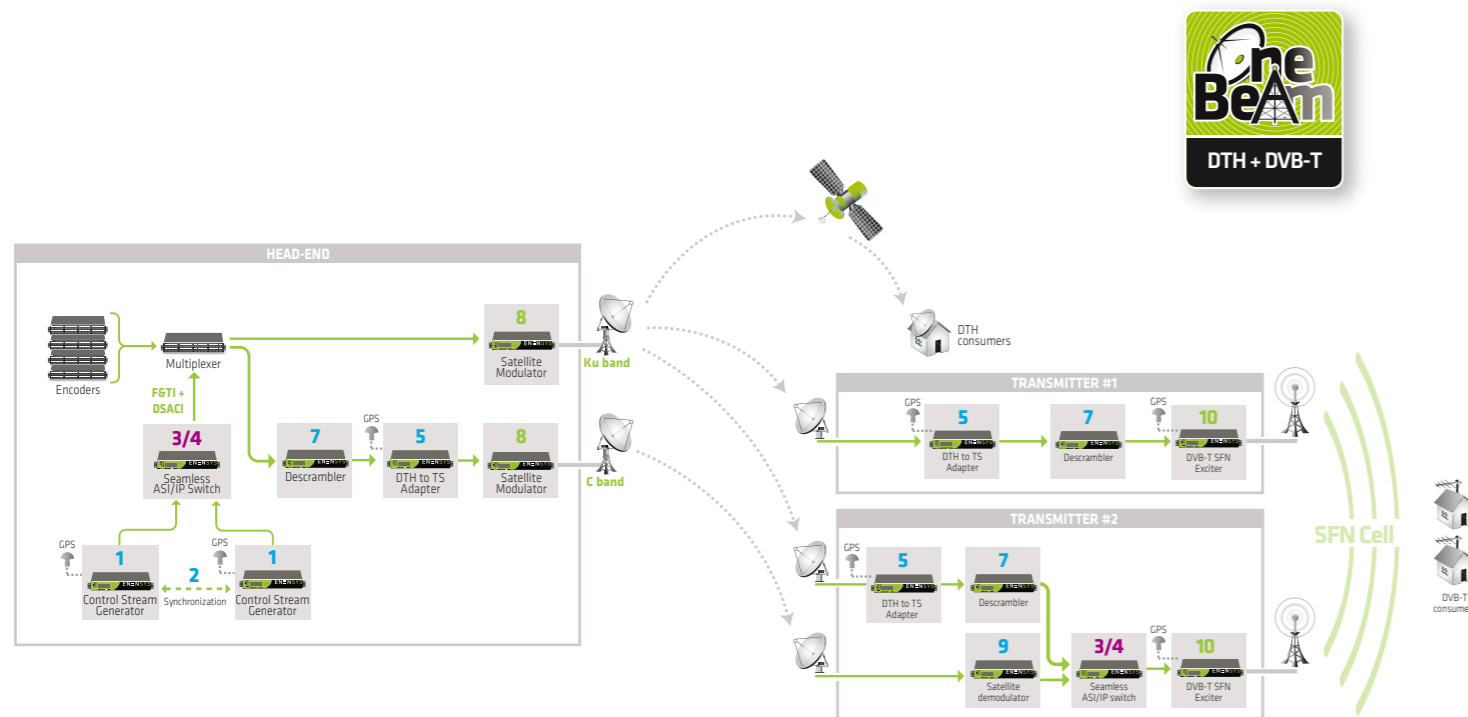
IPGuardV2™

- 2:1 automatic change-over of IP streams
- 1+1 seamless redundancy between two MPEG-2 TS
- 1+1 seamless redundancy between two T2MI streams
- ETR290, T2-MI and SFN based switching conditions
- 6x independent TSolP switches based on TS or T2MI criteria
- 60x independent IP switches based on IP criteria
- Up to 6 IPswitches in 1U
- Bypass mechanism over IP

6 Daughter Site Adapter

TxEdge OneBeam™

- Deterministic T2MI generation for SFN/MISO
- Generation of DVB-T2 Multiplex from several feeds
- Single and Multiple PLP support for DVB-T2
- PSI/SI update on DTT multiplex
- BISS-1 descrambling support
- In-band firmware update to ease maintenance
- ASI, IP and DVB-S/S2 inputs



3 Seamless ASI switch

ASIIPGuard™

- 2:1 or 3:1 automatic change-over
- Up to 6 ASI switches in 1U
- 1+1 seamless redundancy between two MPEG-2 TS
- 1+1 seamless redundancy between two T2MI streams
- ETR290, T2-MI and SFN based switching conditions
- Optional IP inputs/outputs for ASI and IP switch
- Bypass mechanism over ASI and IP

7 Bulk Descrambler

TSDescrambler™

- Descrambling MPEG-2 TS encrypted with DVB-CSA algorithm
- TS/T2MI over IP input and TS/T2MI over IP output
- Descrambling the whole MPEG-2 TS or part of it (PID filtering)
- Up to 2x ProCAM to be hosted in the module
- Up to 6x TSDescrambler in 1U to host up to 12x ProCAM
- Compliant with major CA vendors

5 Daughter Site Adapter

TxEdge OneBeam™

- Deterministic TS generation for SFN broadcasting
- Generation of DVB-T Multiplex from several feeds
- PSI/SI update on DTT multiplex
- ASI, IP and DVB-S/S2/S2X inputs
- BISS-1 descrambling support
- In-band firmware update to ease maintenance
- T2 ready. One-click button to switch in DVB-T2

9 Satellite demodulator

SatCasterII™

- Dual satellite demodulation
- C-band and Ku-band support
- DVB-S/S2 and DVB-S2X support
- BISS-1 descrambling as an option
- 1+1 automatic redundancy
- Multistream support

10 DVB-T/T2 SFN Exciter

TwisterII™

- High-end & Cost effective Rack Exciter
- DVB-T/T2, ISDB, DTMB standards
- MFN and SFN support
- Renew/Upgrade existing TX
- Digital Adaptive Precorrection
- Automatic Gain Control



ONEBEAM WITH EWS IS ENENSYS SOLUTION TO INFORM A WIDE AUDIENCE OF IMMEDIATE DANGERS USING A STANDARD TV SERVICE DELIVERING BROADCAST VIDEO AND AUDIO. ALL NORMAL PROGRAMMES ARE INTERRUPTED AND REPLACED BY THE EWS SERVICE WHEN AN ALERT IS TRIGGERED. VIDEO-BASED ALERTS CAN BE BROADCAST FROM SELECTED TRANSMITTERS ON A REGIONAL BASIS

FEATURES

- Video based Emergency Warning System
- Regionalisation support (rEWS™)
- PSI/SI independent to guarantee EWS Alert delivery
- SFN broadcast support
- DVB-T/T2 transmitter agnostic

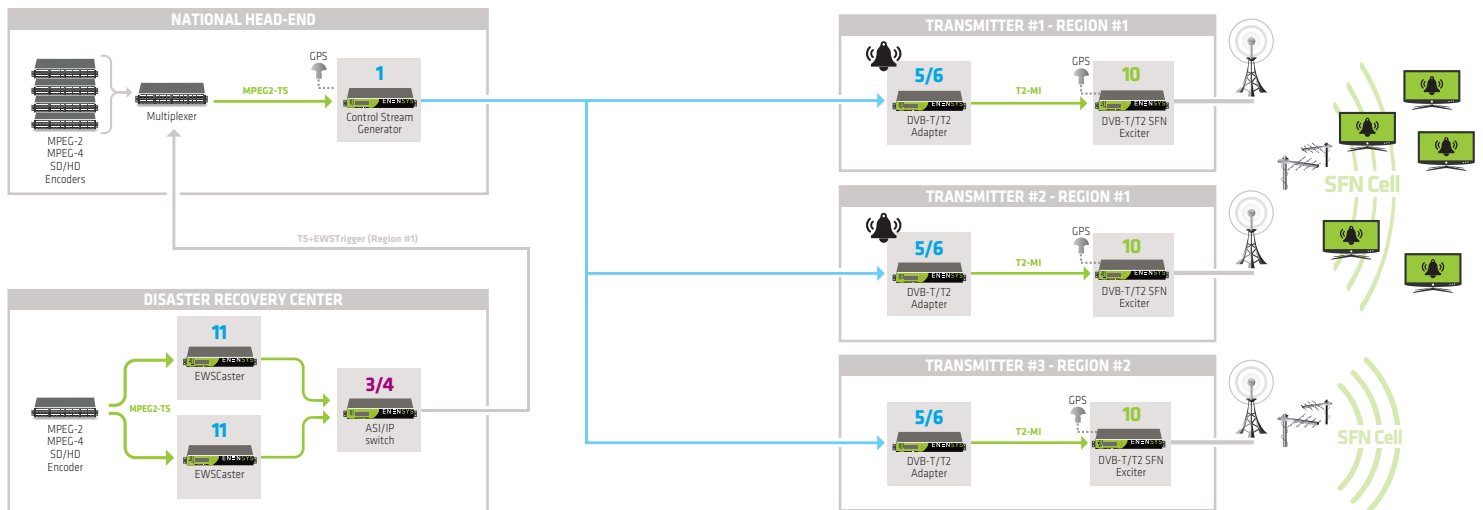


APPLICATIONS

- Inform a wide audience of immediate dangers such as earthquakes, floods, tsunami, etc.
- Use DTT network to reach the largest possible audience
- National or regional alert coverage (rEWS™)

BENEFITS

- Uses standard DVB-T/T2 receivers
- Deliver alert on a regional basis
- Use visual and audio information to reach the largest possible audience
- Field proven solution



11 EWS trigger inserter

EWSCaster™

- Located at recovery disaster center or Head end
- Insert EWS trigger in the Live EWS stream
- Support up to 80 regions and 255 subregions
- In-band or out-of-band delivery of EWS trigger
- Simultaneous triggers generation

