

DVB-T2 terrestrial broadcasting

Many broadcasters and content providers around the globe are making the transition to digital terrestrial television or upgrading their DTT systems. The changes may be happening at varying paces and with different standards, however everyone has the same end goal—to stay competitive in the new media landscape.

Nevion's cProcessor portfolio is at the forefront of the industry, helping network operators worldwide to simplify day-to-day operations, reduce costs and take advantage of new revenue streams, with easy-to-deploy solutions for advanced digital terrestrial television (DTT) solutions across standards. The latest advanced DVB-T2 from Nevion provides the ultimate solution operators need to take their networks into the future.

Robust DVB-T2 solutions

DVB-T2 is the world's most advanced digital terrestrial television standard offering high efficiency, improved robustness and increased flexibility. Nevion makes the most of these benefits, maximizing highly efficient use of valuable broadcast frequency spectrum for audio, video and data delivery.

Nevion's advanced DVB-T2 solutions are the preferred choice of major terrestrial operators, supporting contribution to terrestrial headends, multiplexing for SFN operation, IP or satellite distribution to transmitter sites, SFN transmission, local content insertion and processing. These field proven solutions provide very high quality of service (QoS), thanks to the company's reliable IP transport solution, and monitoring and switching devices, combined with advanced management software.

Nevion's award-winning cProcessor transport stream processing and multiplexing products make complex set-ups simple, enabling tailoring of regional and local service packages, component filtering, advanced updating of PSI/SI/PSIP tables, and enhanced quality of service.

Benefits snapshot



- Award-winning cProcessor transport stream processing and multiplexing product suite
- Easy tailoring of regional and local service packages
- Advanced updating of PSI/SI tables
- Reliable SFN feed over IP, satellite or wireless
- DAB and FM radio distribution over IP

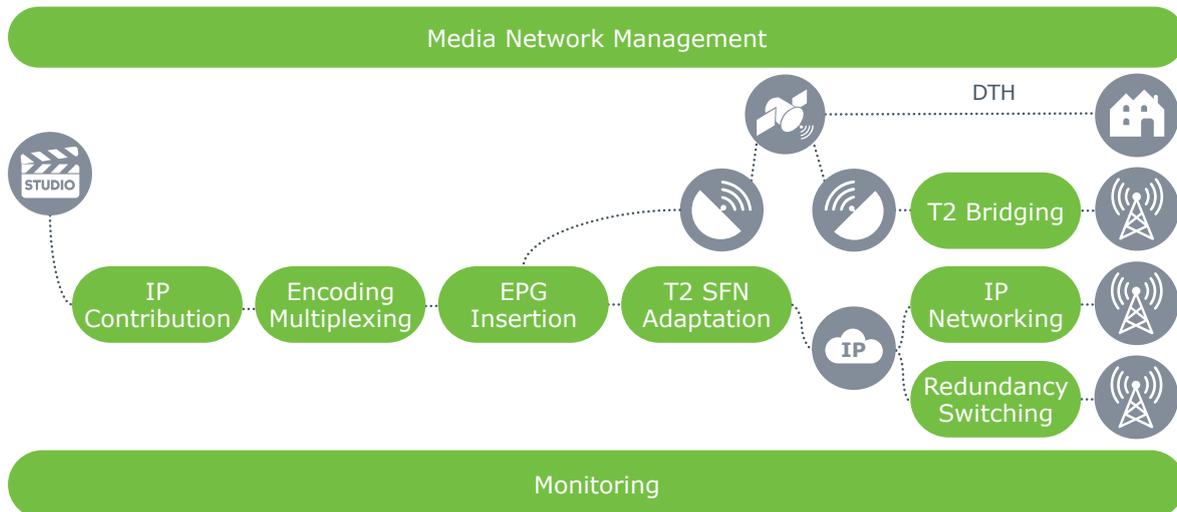
Advanced SFN

The ability to simplify the addition of gap filler transmitters to cover shadow areas in valleys or city centers, has seen Single Frequency Network (SFN) solutions grow significantly in today's digital terrestrial television landscape.

Nevion provides multiple solutions to build reliable SFN networks in different ways—over IP, satellite or wireless.

SFN requires advanced solutions for feeding transmitters and Nevion provides unique redundancy changeover solutions to maintain SFN operation.

Digital terrestrial television



Improved spectrum utilization

Nevion applies technologies that improve spectrum efficiency and reduce costs. Our DVB-T2 solutions feature a 5% increase in bit rate efficiency through utilization of unique technologies, such as adaptive insertion of EPG data and contribution via visually lossless, extremely low latency JPEG 2000 codecs.

Regionalization of DTT multiplexes

Nevion has a range of solutions for designing regionalized DVB-T2 networks using either centralized or distributed architectures.

Central generation of regional T2-MI

Nevion's new CP4400 TS processor supports the generation of multiple T2-MI streams. This allows the operator to generate a set of T2-MI streams covering multiple regions in a single unit. Each T2-MI stream will contain a T2 multiplex, where national programs combine with one or several local channels.

Deterministic T2 SFN multiplexing

Nevion CP330 deterministic re-multiplexer makes it possible to combine distribution of T2 SFN with DTH satellite broadcasting. Nevion's unique timing controlled multiplexing technique makes it possible to generate a new SFN compatible DVB-T or T2-MI, by add and drop multiplexing from a single or multiple DTH transport streams at the transmitter sites. This technology offers a unique way to save bandwidth when building SFN networks with local content.

PLP replacement

Alternatively CP330 can be used for local insertion by multi-PLP remultiplexing. This technology is highly advanced PLP processing where a "dummy" PLP is replaced with local PLP. The processing also includes changing content of the SI tables in order to update SI and reflect the new service configurations.

Monitoring

Nevion also offers end-to-end monitoring from SDI input to T2 off-air monitoring.

DVB-T2

- CP330 T2-Bridge – PLP Replacer mode Deterministic Mux mode
- CP560 – DVB-T2 Gateway
- CP524 – TS Adapter
- CP525 – cMUX Remultiplexer
- CP440 – TS Processor
- TNS541 – TS Monitoring Switch
- TNS544 – TSolP Switch
- TNS4200 – Media Monitoring Probe
- VideoIPath – Monitoring, connection and inventory management