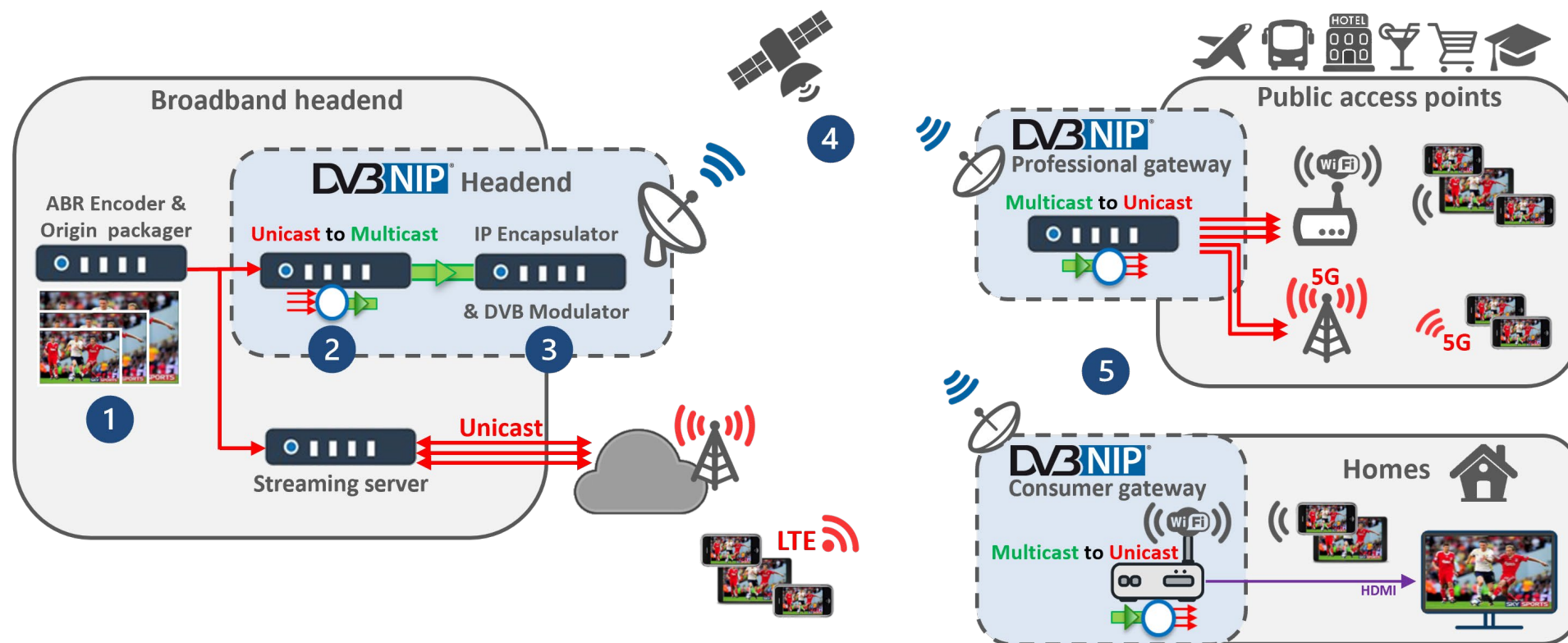


DVB Native IP @ IBC2024



- 1 DVB-AVC, DVB-DASH:** live or on-demand content is encoded and packaged using unicast ABR (adaptive bitrate) streaming formats also used for delivering OTT services over broadband networks
- 2 DVB-MABR:** unicast content is encapsulated into multicast, converting unpredictable unicast traffic into a steady flow whose flat bandwidth enables carriage over broadcast networks
- 3 DVB-GSE:** Generic Stream Encapsulation allows the multicast data to be carried directly over a DVB-S2X or DVB-T2 physical layer; to support the migration of existing DVB networks, an optional backwards-compatible mode instead uses Multi-Protocol Encapsulation (DVB-MPE) to enable delivery within an MPEG-2 transport stream, for example using DVB-S2/T2

- 4 DVB-S2X, S2 or T2:** the physical layer relies on the well-proven and highly efficient second-generation DVB modulation schemes, allowing existing transmission infrastructure to be reused
- 5** On the receiving side, **DVB-NIP gateways** based on existing – thus highly cost-effective – DVB receiver technology, make it possible to feed, through Wi-Fi, any connected device including legacy smartphones.

Professional gateways can serve hundreds of devices in public venues, mobility environments or even feed **5G networks**, while consumer models serve main screens in addition to a few mobile devices. The content guide can be retrieved using **DVB-I**, with or without an internet connection.

Our DVB-NIP demos at IBC2024

In-home multiscreen

A live feed of Rai television services from Italy is received via Eutelsat HOTBIRD on a DVB-NIP gateway from Inverto, which streams to mobile devices and feeds the main screen. The content guide is retrieved thanks to DVB-I, with the server address broadcast via satellite.

Public access points

An EKT DVB-NIP gateway, based on RDK and supporting premium apps, showcases a typical hospitality application: live television is available alongside on-demand content pushed overnight.

A similar use case is highlighted using a DVB-NIP gateway from SEI Robotics based on Android TV.

Both gateways are used as hotspots, streaming to mobile devices and feeding the main screen.

Distance education

A professional gateway from Noovo embeds a learning management system that interacts with tablets to which live or pushed content is served.



The DVB Members shown here contributed to the DVB-NIP demos on our booth at IBC2024.

Why DVB Native IP?



DVB-NIP enables standards-based OTT delivery on DVB broadcast networks. It reduces the cost and complexity of media distribution by enabling the use of a **single converged platform to feed both IP and broadcast networks**. It also improves sustainability by eliminating duplicated streaming sessions. Typical applications include:

- **In-home multiscreen** – DVB Native IP can be leveraged for a modernized DTH satellite platform, enabling content delivery to all screens including mobile devices.
- **Public access points** – in communities, hospitality venues or mobility scenarios (maritime, long-distance transport, ...) DVB-NIP hotspots can serve high-quality linear OTT including at peak hours, and PVOD, e.g., pushed during off-peak hours.
- **Distance education** – in areas where broadband infrastructure is insufficient for distance learning, DVB-NIP gateways embedding educational applications that can be adapted by governments will bring thousands of kids back to school!

DVB Native IP elsewhere at IBC2024



EKT (1.D29)

Commercially deployed DVB-NIP solutions around the world (multiscreen, one-way DRM, multituner); focused on the DTH transition.

ENENSYS (2.B37)

Showcasing its StarStream solution enabling streaming (linear and VOD) over satellite and e-learning services.

Eutelsat (1.C41)

Solutions for education, hospitality and in-home multiscreen, multi-room experiences, leveraging DVB-NIP and DVB-I.

Inverto (1.A47)

Q-Stream platform for satellite delivery of multiscreen video streaming and targeted ads, mobility entertainment and education.

ST Engineering iDirect (1.A49)

Demonstrating the SKYflow ecosystem for satellite-based distance education, as implemented in Peru.

SEI Robotics (1.F38)

Android TV, featuring DVB-S2X HEM and DVB-GSE tuner, to bring OTT over satellite broadcast.

Sofia Digital (1.D98)

Extension of the DVB-I reference client for detection of DVB-NIP gateways and discovery of DVB-I service lists.

“To OTT and beyond! Where will DVB Native IP take the satellite industry?”
Saturday 14 September, 14:30, Room E105