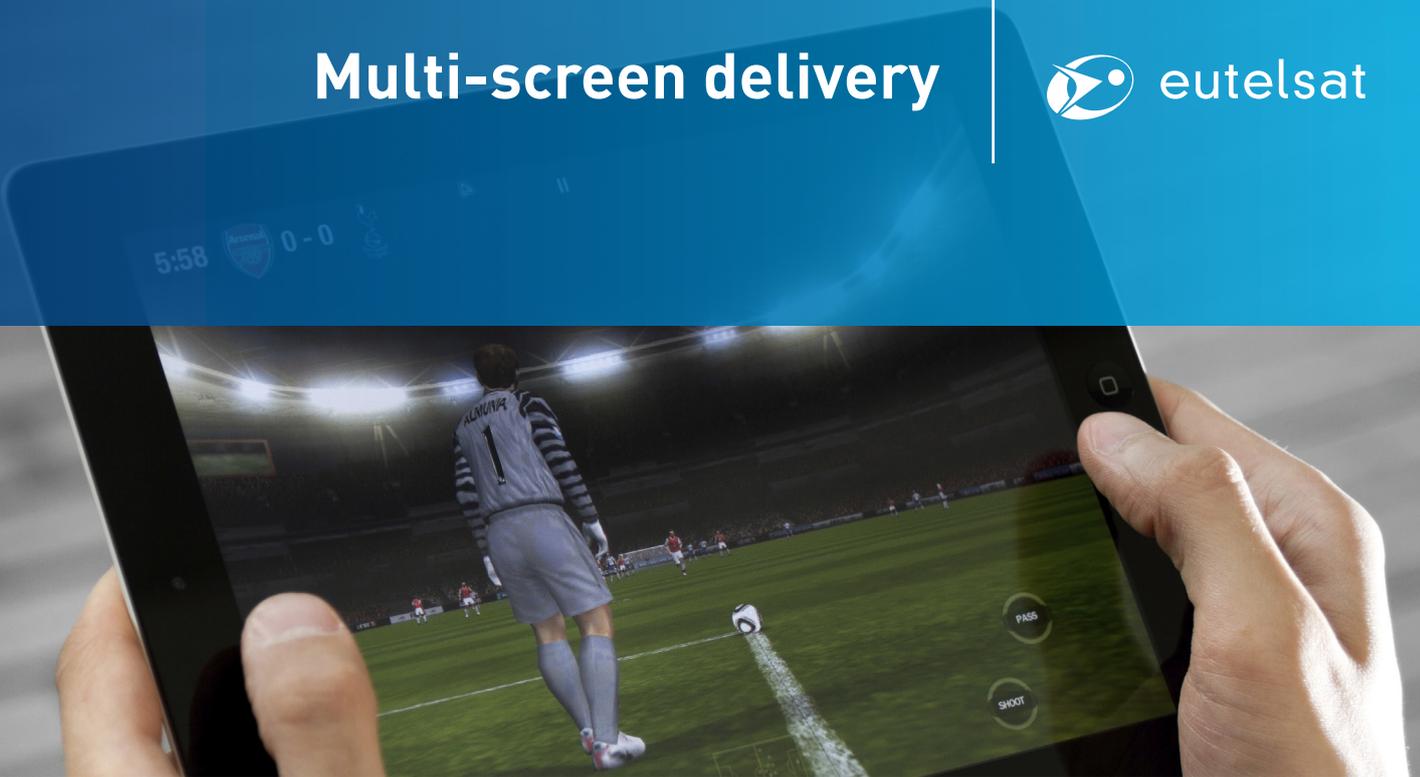


# Multi-screen delivery



## Delivering IP-native video content to mobile devices via satellite.

### KEY FEATURES

- Satellite multiscreen video delivery to smartphones and tablets
- Reach millions of viewers with consistent quality
- Linear TV and on-demand
- Free-to-air and premium content with simple Digital Rights Management integration
- Seamless integration with existing OTT services and mobile applications
- Ubiquitous coverage with guaranteed quality of service irrespective of local internet connections
- Reduced OTT latency and fast zapping times
- Suitable for public venues and at home

Smartphones and tablets play an ever-more central role in our daily lives, as audio-visual consumption trends evolve. Portable devices are increasingly used to watch video content on the move, with users demanding high quality on smaller screens.

Eutelsat's SmartBEAM is a multi-screen delivery solution which addresses the growing number of IP-native screens, while leveraging all the advantages of satellite broadcast to offer rich video content and a high-quality user experience.

TV operators can broadcast video content in IP format via satellite, creating a network dedicated to all IP-native devices such as tablets and smartphones. The solution can be deployed at home as well as in public venues, such as bars, restaurants, hotels, shopping centres, and train stations.

The inherent strength of satellite broadcasting enables TV operators to provide ubiquitous coverage with a guaranteed quality of service and extend OTT video services across the territory irrespective of local internet connection speeds or network congestion.

SmartBEAM offers the same experience to users located beyond range of terrestrial networks, eliminating user frustration with re-buffering as terrestrial networks saturate.

Combining satellite broadcasting with state-of-the-art video players allows low video latency and fast channel zapping times, irrespective of the number of simultaneous users, further enhancing the end-user experience.

TV operator distribution costs remain stable even as service usage increases. End-users can enjoy unlimited streaming time, irrespective of their monthly mobile data plan.

Broadcasting IP-streams also simplifies satellite distribution by delivering the relevant video format and content protection (DRM) to IP-native devices. The solution can run on low-cost satellite boxes, or even on already-deployed set-top-boxes via a software upgrade. It can also be easily integrated with other applications running on the devices.

## How it works

Eutelsat's SmartBEAM is the first end-to-end platform for IP-multicast over satellite, integrating multiple partner technologies. Based on standard internet technologies and protocols, SmartBEAM is compatible with all common mobile devices as well as Smart TVs.

Live channels and on-demand content are encoded in H264 and packaged with any internet streaming protocol (HLS, MPEG-Dash, Smooth Streaming, etc). They are transmitted via Eutelsat satellites in IP-multicast over a standard DVB-S2 transmission.

On the receive side, a compact low-cost satellite box with embedded IP multicast capabilities, connected to a regular satellite dish, acts as a local Content Delivery Network. It receives the satellite signal, extracts the relevant IP streams and serves them locally to the mobile devices, over a Wi-Fi network. Live content is served on-the-fly, while on-demand content is stored locally and can be accessed at any time by the end-user. The end-user's device connects to the Wi-Fi network and a mobile application is used to play the selected content, similar to an OTT application.



### At home

- Typically 4-5 simultaneous users
- Consumer-grade Wi-Fi access point



### Public venues

- Typically 40-50 simultaneous users
- High-end Wi-Fi access point is required

