



Live in High Definition

A simple, compact and low-cost solution.



High Definition via Satellite

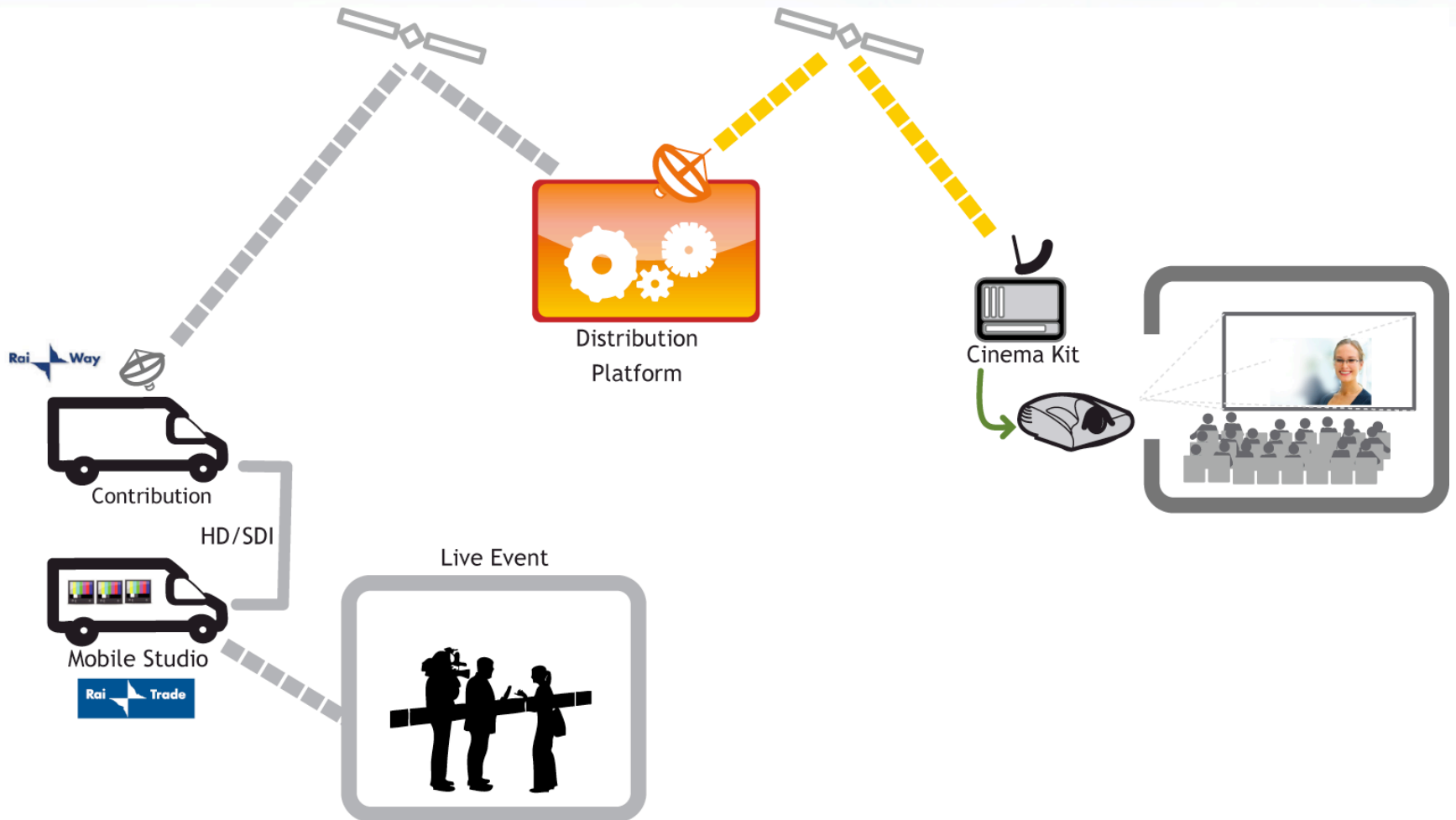
BroadSAT supplies the technology for distributing high-definition live content to cinemas and multi-purpose halls.

The content is transmitted via satellite and played on a *Cinema Kit*, a low-cost, small, non-intrusive system which is easy to install and integrate with other devices in the cinema.

This solution is based on a *platform* developed by MBI as part of UNIC (*Universal Satellite Home Connection*), a project of the 6th Framework Programme of the European Community.



BroadSAT's Solution





Features

Can receive live content via satellites transmitting from any orbital position using the formats MPEG-2 or MPEG-4 over DVB-S/ DVB-S2, and with a bit rate of up to 40Mbit/s

Decodes and decrypts the received content

Encodes and encrypts the content in H.264 (MPEG-4 part 10)

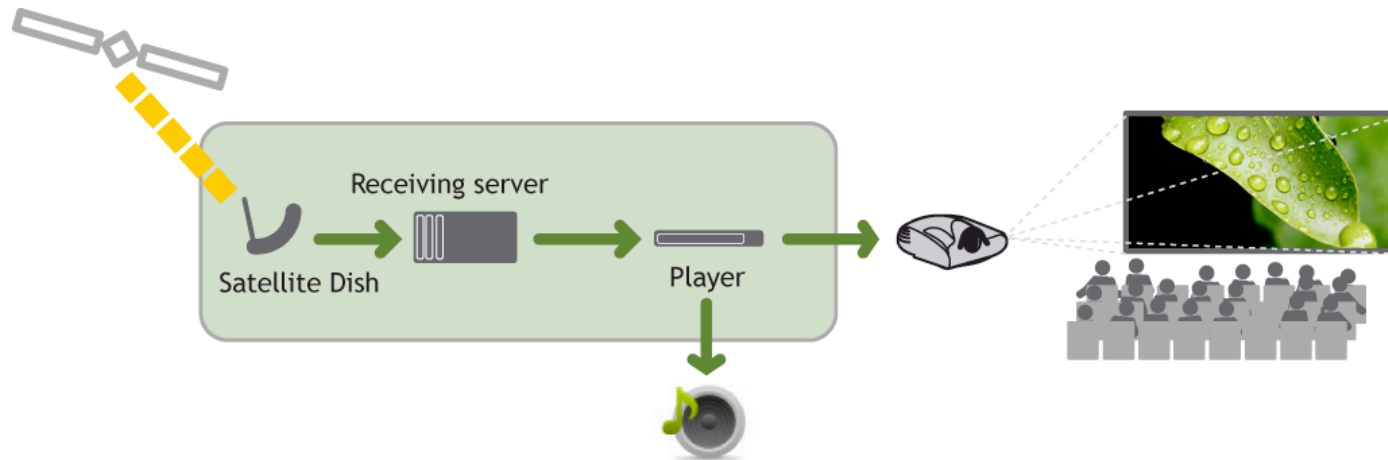
Transmits the content in multicast mode over a dedicated private satellite channel

Supports

- live video with a resolution of up to 1080/i, without any downscaling in the transmission of the content
- additional content (eg commercials) which can be transmitted before the main event or during the intervals



The Cinema Kit



The Cinema Kit receives the content, decodes it and transmits it to a dedicated **Player**, which sends the video to the projector in HDMI and the audio to the audio system in stereo RCA or 5.1 S/PDIF.



Features of the Cinema Kit

Fast installation: no time spent requesting permission from the Authorities. The dish will be installed, pointed and connected by a certified technician. The hardware is provided already configured and installed by qualified personnel.

Ease of integration with other devices in the cinema

Ease of operation: once switched on, the Cinema Kit starts working without the need for an operator

Compact equipment: the dish and the devices to be installed in the cinema are small. The player can be installed near the projector even if it is far from the other devices, so as to reduce the length of the audio and video cables.

Security: if an Internet connection is available in the cinema, the Cinema Kit can be monitored remotely by BroadSAT's staff



Features of the Platform

Reliability: as all the devices are redundant, the platform can continue working even if one of them breaks down, which is of critical importance while transmitting live events.

Interoperability: it can receive content from various sources, either satellite or terrestrial. It supports the most widely-used standards for audio-video contribution.

Operability: it operates in a Europe-wide infrastructure at a carrier-grade level, and is fully managed by BroadSAT's personnel, who are connected up to Digima and the cinemas.



The Platform and the Push System

In addition to systems for broadcasting live events, BroadSAT also offers multimedia content distribution services (both HD and non-HD) based on a *push* model with *multicast* Internet protocols.

This system can be used to transmit the same content to many locations at the same time, thus avoiding repeated transmission of the same content and instead saving network resources.

The content can be transmitted over any type of transmission network. However, satellite networks are best suited for multicast transmissions, as they are broadcast-based.



The Features of the Push System

The push-based distribution model can easily be adapted to the business volume (the total size of the content to be transmitted times the number of the locations that receive the content).

Satellite technology dramatically reduces transmission times and can be used even if no terrestrial connection is available.

This solution can also work as a one-way system using carousel transmission with error correction. Service availability is higher than 99.9% over the year.