



networks & security

- satellite communication
- geographically unlimited broadband access
- company networks
- VOIP solutions
- WI-FI systems
- network traffic control system

multimedia

- multicast services
- streaming services
- telemedicine
- video broadcasting
- multimedia centres
- videoconferencing
- video surveillance
- business TV
- digital TV
- encoding of push content
- real-time subtitling

information systems

- management software for public administration
- CRM systems
- solutions for the heritage ministry
- e-learning
- web solutions

MBI was set up in 2001 and soon became a reliable, constantly evolving reference point for the ICT market.

MBI is located in Pisa, Italy, and employs over 40 highly qualified people (over 80% with technical degree). MBI also has a division at EUTLESAT's headquarters in Paris, France.

MBI is involved in developing and managing some of the most important satellite communication platforms in Europe.

core competencies

► MBI designs, develops and offers consultancy on data transmission systems based on secure broadband networks, both wired and wireless, using DVB-S, DVB-RCS, Skyplex Data, WI-FI, DVB-T technologies. MBI's solutions are based on open standards and, where possible, include open source technologies.

► MBI offers products and services for multimedia content transmission, digital compression and encoding solutions (MPEG 2/4, Microsoft Windows Media) as well as Digital Rights Management (DRM) systems, IP-DVB convergence solutions (encapsulators), conditional access systems for DVB satellite (DVB-S) or terrestrial (DVB-T) transmissions, and distribution on mobile devices (DVB-H).

► MBI has implemented applications for managing personal property and real estate, which are currently being used by the ministry of environmental and architectural heritage. Its valuable experience in complex network optimisation supports decision-making in the production and purchase of multisource/multiform energy for purchasing departments and wholesale divisions.

products and solutions

VIRTUS: remote medical consultation

Virtus is the solution for distributing audio-video content acquired in a medical context. The content can be acquired via biomedical devices for training or real-time expert consultation during important events, such as surgery.

MDF: multimedia content delivery system

MDF (Multimedia Delivery Framework) is the solution for delivering content of any kind and dimension over different channels (satellite, wired and wireless network) with efficient use of the bandwidth available. MDF uses multicast to transmit content from one central location to several potentially interested peripheral locations. Applications of the MDF can be adapted to many purposes: distance training, infotourism, digital cinema, etc.

Eracle: Encapsulator Gateway System

Eracle combines heterogeneous content to transmit it over DVB networks. Eracle manages data and audio/video content using one single MPEG transport stream. Eracle is the solution to the convergence of IP networks within DVB transmission systems. The same content can be distributed both over terrestrial networks (IP) and DVB broadcasting networks (satellite, terrestrial, mobile devices).

Niagara: Streaming Server

Niagara is the solution for acquiring audio/video content of any type. Niagara transcodes in real time audio/video streams (MPEG2, MPEG4) from DVB-S cards, analogue television signals or other analogue or digital input. Streams created can be saved or transmitted over standard ISMA based IP networks. Niagara can be integrated with mobile DVB-H networks based on the H.264 standard.

SIMBA: integrated system for managing environmental and architectural heritage

SIMBA is a web application which manages proceedings relating to work projects involving real estate in a simple, quick and thorough way.

PowerSchedO: a bidding tool

PowerSchedO optimises energy production and trading networks. PowerSchedO offers a solution for Unit Commitment and Best Bidding problems.

current projects

OPENSKY™: one-way satellite Internet services

www.broadsat.com

MBI has developed the OPENSKY™ multimedia platform for Eutelsat. The platform offers B2B and B2C services. MBI is involved in platform administration, monitoring and management of the service as well as in developing new technological solutions.

MOWGLY: broadband on aircraft, trains and vessels

www.mowgly.org

MBI is a member of the European project MOWGLY (MOBILE Wideband GLobal Link sYstem) together with some of the largest European transport companies: Airbus, Rockwell-Collins France, Alstom Transport and others. The challenge is to bring broadband services onto modern transport (aircraft, trains, vessels). MBI is responsible for developing the land-based service centre and is involved in creating the on-board service portal.

RTRT Sat: extension of the Tuscan region telematic network via satellite

www.satellite.rtrt.it

RTRT Sat extends the telematic network of the Tuscan Region via dedicated satellite link and two-way terminals. Over 70 sites in 13 mountain communities have been linked to the network. MBI is responsible for surveys, installations and maintenance.

V4DL: distance learning platform with dedicated set-top-box

The V4DL (Videosat for Distance Learning) project is co-funded by the European Space Agency. It aims to create a complete distance learning platform. V4DL includes a trial period with ECM training courses for the medical community. MBI is creating an advanced set-top-box for V4DL designed for advanced applications.

GRULES: georeferenced information system

The Grules project has been created for the Tuscan Region. GRULES generates interactive maps by overlaying data and images. Georeferenced information can be therefore graphically accessed on a user-friendly web interface. The applications of Grules range from environmental monitoring through business decision support to description of complex systems based on heterogeneous information classes.

UNIC: Triple-Play TV-centric services

www.unic-project.org

UNIC (Universal Satellite Home Connection) is a European project aimed at creating low-cost interactive services that can be accessed on television. This service is particularly useful for disadvantaged users and communities. MBI coordinates the development and integration of the system. Partners include Alcatel Alenia Space, Eutelsat, RAI, Wind, Kreatel.