

European Pioneers in iTV over Satellite

iTV



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iTV Pioneers

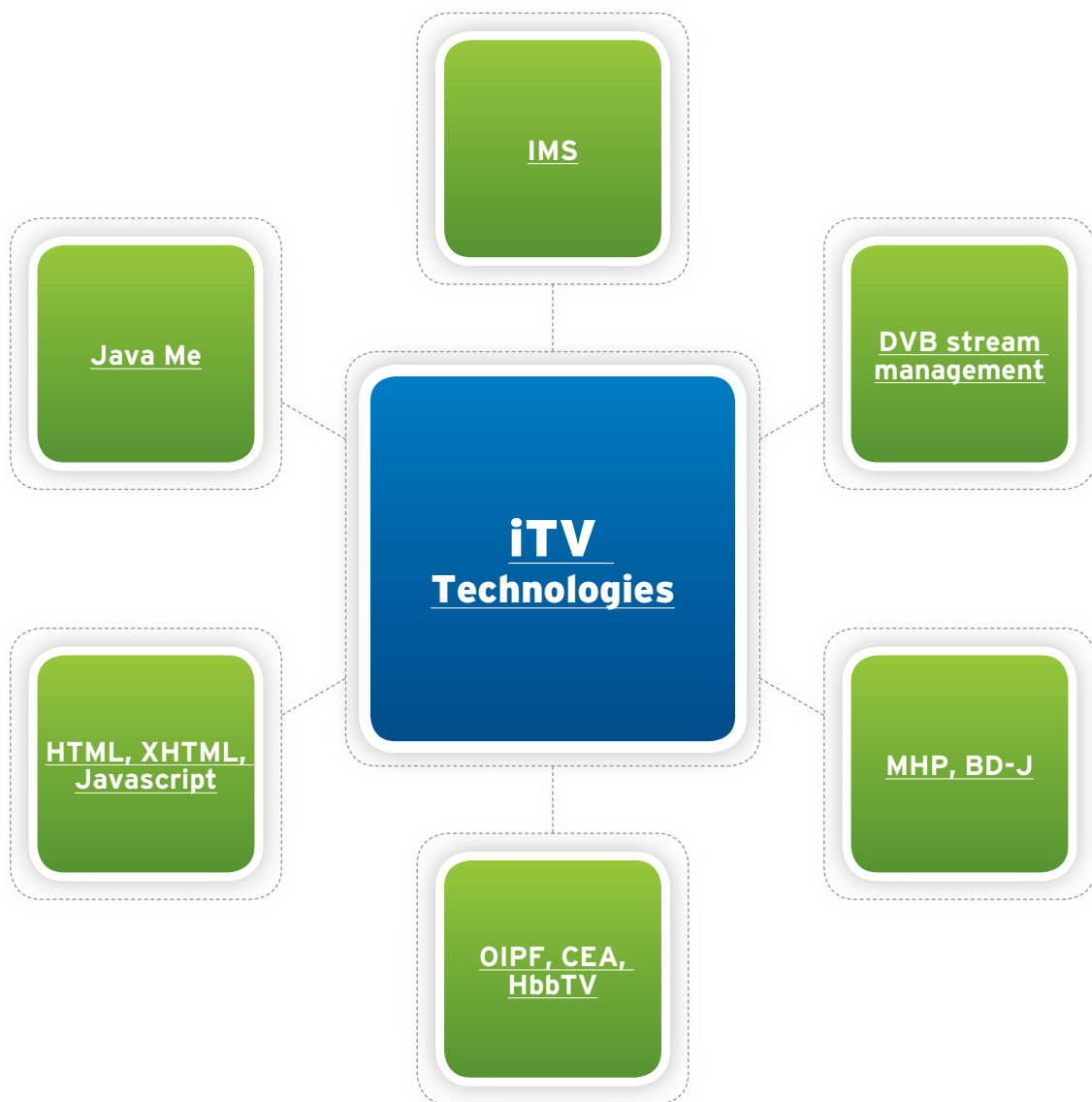
Amphinicy Technologies has a **strong history** in the design and development of various iTV and other value-added systems. We can be considered one of the **pioneers** of iTV over satellite in Europe.

Being constantly present in the satellite industry for **15 years**, our engineers have gained an **incredible amount** of experience and knowledge.

We don't sell finished products, but rather our **priceless** experience and expertise. All our solutions are **tailor-made** to exactly fit our customers' needs.

So join our club of satisfied customers. 😊

iTV Technologies



Core iTV COMPETENCES



**Make some popcorn, get comfortable
in your favorite couch and see
what's on our iTV tonight...**

SATMODE

2 Way Satellite iTV Platform

QUICK FACTS

- ➔ Interactive TV solution via satellite
- ➔ Provides various services to the end user
- ➔ Supports multiple service providers concept
- ➔ Walled garden internet services

Some of the services SATMODE offers to viewers are:

- Interactive advertising
- Betting
- Communication: Chat, SMS, e-mail
- Tele-Voting, Polls, Play-along, Quiz
- Games: standalone or multiplayer
- Home Shopping
- Personal Data Consultation / banking
- Walled Garden Internet Services

DESCRIPTION

Pioneering technology that paved the way for what we do today!

SATMODE is a set of technologies originally developed for **interactive TV**. It's based on an **always-on return channel** via satellite and is designed for ultra low-cost feasibility. Although SATMODE has not yet been deployed for interactive TV, it is used in ASTRA2Connect, a **major** two-way satellite broadband Internet service available across Europe.

SATMODE also supports features enabling the technical management of the iTV platform:

- Enhanced conditional access
- Audience metering
- Statistics gathering
- Hard disk drive content management

The system is scalable up to the entire DTH population and is designed to minimize terminal cost.

Messaging via TV

QUICK FACTS

- ➔ Various protocols supported (e-mail, SMS, MMS, Instant messaging)
- ➔ Unified Messaging center for all protocols with an easy to use client GUI
- ➔ Cross protocol communication example SMS to Jabber (XMPP)
- ➔ Extendable thanks to its plug-in design

DESCRIPTION

*Oh, that great show is on TV, I just have to **tell a friend...** Now if I could only find my mobile phone...*

We developed a messaging application for interactive TV that directly targets the consumer market. It is deployed on the customers' home equipment (i.e. TV set-top-box) and offers various functionalities in the field of personal communication.

By using the application, users are able to **receive, send and manage** various types of messages including **SMS, MMS** and **e-mail**, by simply using the remote control of their TV sets. Furthermore, the more advanced features of the application allow users chat with both other TV users and users with accounts for internet messaging services like ICQ, MSN, AIM, etc.

From the provider's point of view, this is a killer application for cable or satellite operators who can provide messaging services to their audience/subscribers.

This application represents a good example of real-life use of two-way satellite communication. Using the TV sets for communication the same way that we use computers or mobile phones is truly interactive, isn't it? Our engineers have developed all the necessary tools make this a reality.



Figure 1 - Messaging Application

Gaming & Payment

QUICK FACTS

- Interactive TV games developed for the SATMODE platform
- Multi user support
- Integrated chat service
- Payment module

DESCRIPTION

*Hmm... 25 minutes until my show starts... **what to do?** Why not play a quick game of blackjack with your friend **on your TV.***

When it comes to interactive TV, **games** are one of the first things that come to mind. We have successfully implemented several entertainment applications which clearly demonstrate the possibilities of integrating online TV gaming with other networks, namely the Internet.

The Server side of the application allows users to exchanging messages with each other using the SATMODE iTV network (more specifically its messaging service).

Games such as Connect Four, Black Jack, etc. make use of the payment service for **financial transactions**. This eWallet based feature isn't only available to games, but all SATMODE applications.

These are all great examples of the integration of various technologies and services to bring interactive TV content to the end user.



Figure 2 - Black Jack game

Electronic Program Guide

QUICK FACTS

- ➔ Electronic program guide
- ➔ Retrieves data from various sources (plug-in concept)
- ➔ HTML based EPG rendering
- ➔ Client can be any valid XHTML browser

TV GUIDE						
	<< 7	14:00	14:50	15:00	15:30	8 >>
1	tv5	TV5 Monde, le journal		>> Agathe et le grand magasin		tv5
2	eurosport	Tour d'Italie - Le Giro. 18e étape		>> Tour d'Italie - Le Giro. 19e étape		eurosport
3	cnn	World News	World Report	World News	World News	cnn
4	action	<< Mandrin	Nico		>> La neuvieme configuration	action
5	premier	>> Color of night				premier
6	ard	Tagesschau	In aller Freundschaft	Tagesschau	Sturm der Liebe	ard

Figure 3 - EPG displayed on MHP browser

DESCRIPTION

One of the **first** satellite channel program guides in Europe.

This service has been created primarily to provide users with an Electronic Guide Program on their TV sets.

The Electronic Program Guide application consists of a **service application** responsible for gathering and organizing TV channel data, and a **client application** which **renders the TV channel data** on the users' TV screens.

Because the application targets the end users, as with similar services, flexibility and design play an important role. With this kept in mind from the very beginning of development, the solution was based on the XSLT, CSS and XHTML standards. This enabled easy customization and deployment on the various electronic devices supporting these XML based technologies.

The real core technology that this service relies on is the SATMODE platform and its associated components and services.

Channel Finder

QUICK FACTS

- ➔ Channel guide providing genre based navigation for radio and TV channels
- ➔ Retrieves data from the DVB stream
- ➔ No return channel required on the receiver
- ➔ Application can be downloaded directly to the receiver via satellite

DESCRIPTION

*Do you like sports? Do you often flip through **countless** channels to find a good football match? Well, there's a **better way**.*

Channel guides, interactive channel listings and other navigational aids are highly important for ensuring easy and comfortable service browsing, visibility of new services and viewer loyalty.

The ASTRA Channel Finder application brings a great **enhancement** to the Electronic Program Guide. It provides an attractive, genre-based **navigational tool** for the easy selection of TV and radio channels. Using the SES-Astra transmitted **metadata**, it also categorizes available channels by genre (News, Sports, etc.) and notifies viewers about new available services. Other additional channel information, such as the different available languages, electronic program guides, etc. is also available, enabling channel filtering and thus making user browsing even more pleasantly.

The application is implemented for the MHP platform and was **presented** by SES-Astra at the **IBC** (International Broadcasting Convention) trade-show in 2004.



Figure 4 - Channel Finder application

VIAP

IMS Compatible iTV Application Platform

QUICK FACTS

- ➔ iTV platform providing a common base for iTV application development
- ➔ Out-of-the box common services (User management, Payment, Messaging, Application management)
- ➔ Modular and extensible platform based on open industry standards
- ➔ Demo applications

DESCRIPTION

*People say iTV isn't simple. There's **so much** to consider like easy content creation, user security, statistics, traffic mgmt., etc... VIAP disagrees.*

VIAP (Video Interactive Application Platform) is an aggregation platform for services provided by **iTV** content provides **across different delivery mechanisms** (DTH, mobile, IPTV ...). Since it is based on the **latest** industry **open standards** such as EJB3, JMS, JCA, JAAS, SOAP, etc., the platform guarantees a **quick ROI**, and ensures compatibility with any current and future products.

VIAP IMS Compatible iTV Application Platform

PLATFORM PROVIDES

For the broadcasters:

- Access to the platform and managed services
- Managed data traffic through platform
- Managed and secured access to deployed iTV STB boxes
- Application hosting and deployment
- Integration with the existing linear content
- User statistics and profiling
- Creation of branded experience beyond the linear content provision

For the Content Providers:

- Access to the platform and managed service
- Access to generic external gateways (messaging, SMS, e-mail, payment gateways,...)
- Application testing and verification
- Customer specific iTV back-end services (i.e. data packaging)

DEMO APPLICATIONS

- Unified messaging centre for BD-J clients (Blue Ray players, PS3)
- Interactive advertising demo
- Interactive games

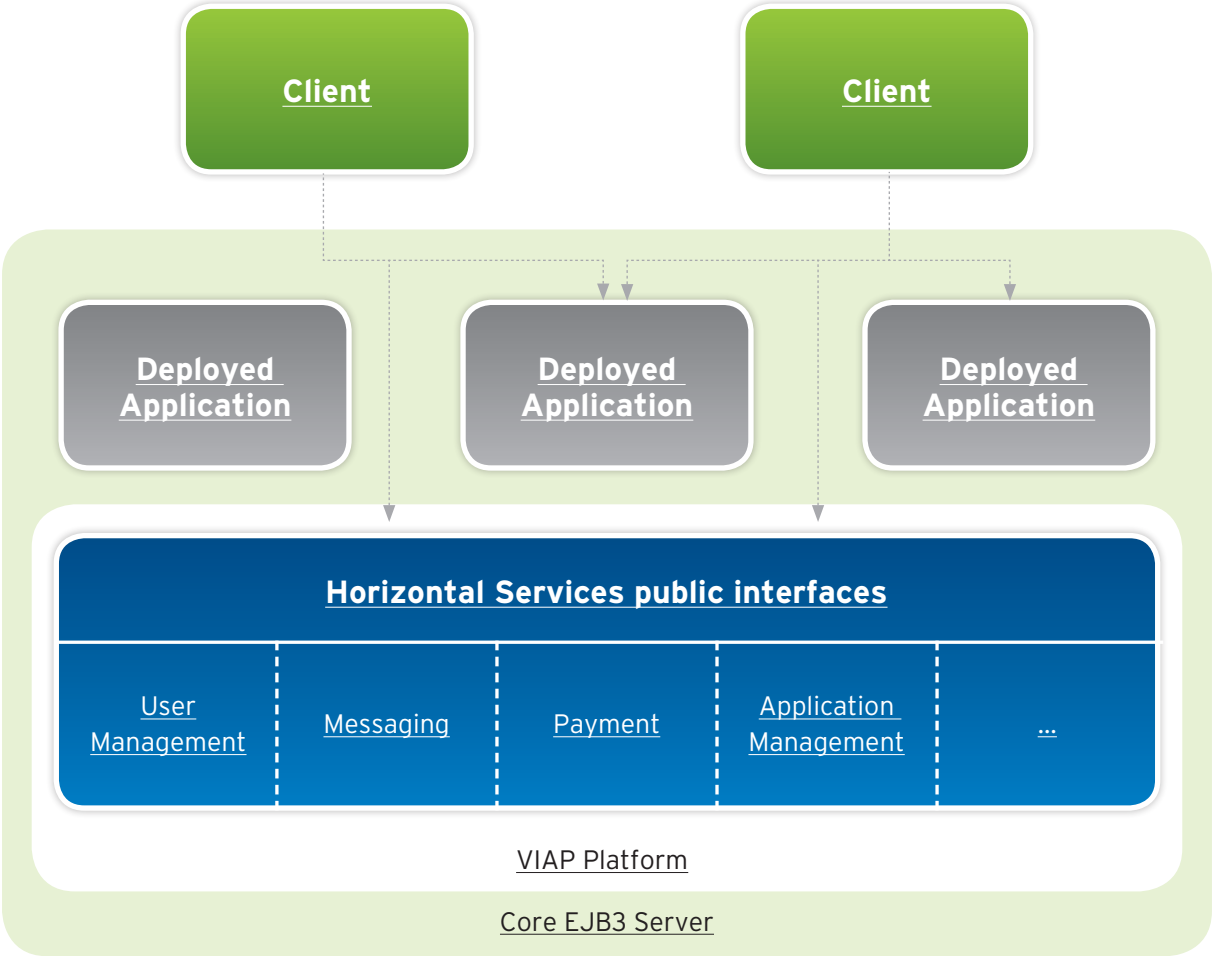


Figure 5 - VIAP overview

To recap...

Our expertise over the years enables us to provide our customers with solid solutions to enhance their business.

Always following industry trends and working with cutting edge technology keeps our engineers ready for any challenges that our customer can have. Working closely with satellite industry leaders (SES Astra, Newtec, ND SatCom, etc.) only proves our quality and shows that we meet the highest industry standards.

You can rest assured that our projects are never only software, but a down-to-business project with a clear purpose and concrete goals. Taking into account the reusability, extendibility and portability of our software, a lot of future developments can be done with minimal effort and proven functionality.



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TECHNOLOGIES

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