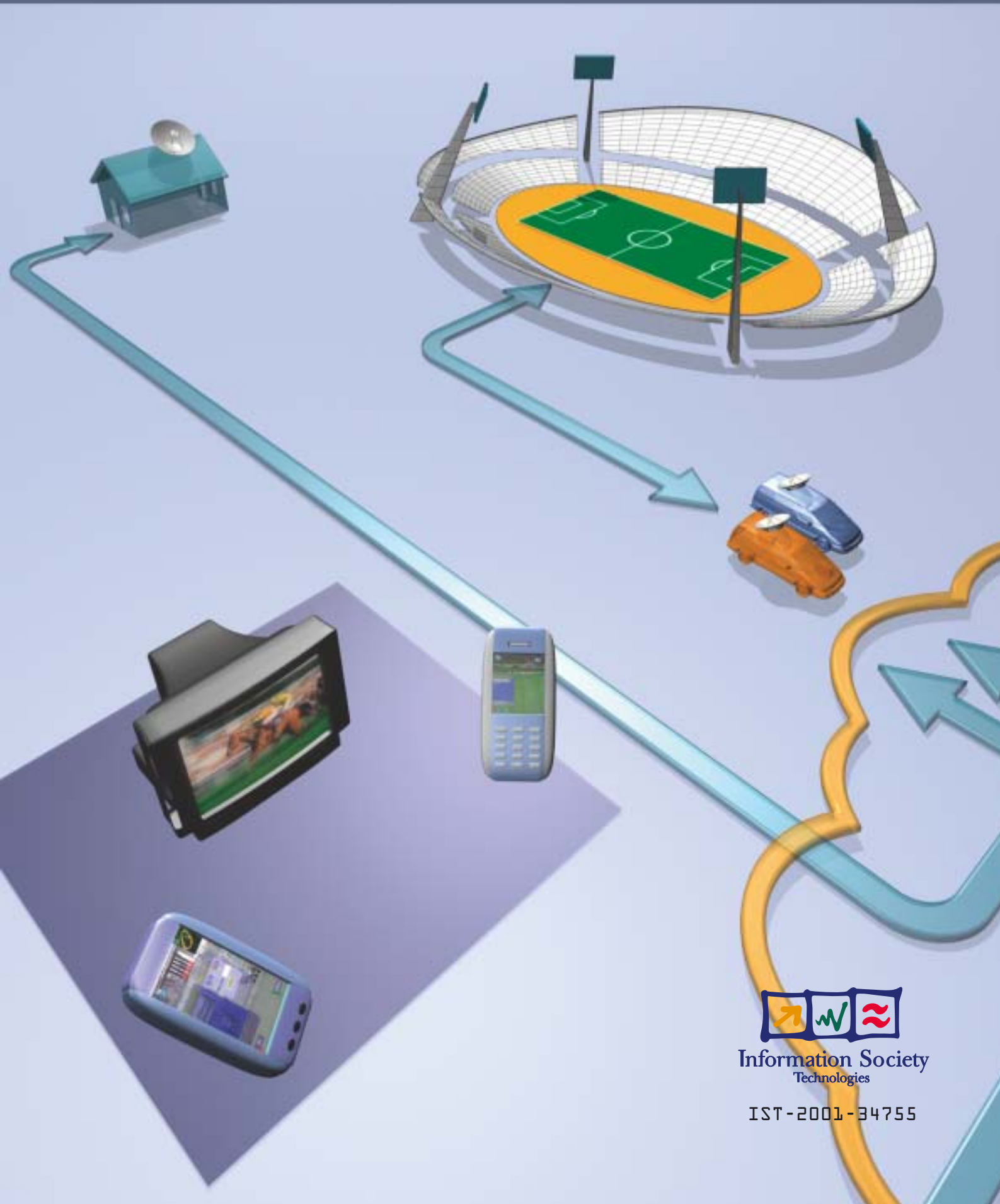
Multi-platform e-Publishing for Leisure and Interactive Sports Advertising

MELISA



Information Society Technologies

IST-2001-34755

MELISA

The MELISA Project

MELISA establishes the infrastructure to support the virtual value chain for sports events broadcasting over wireless and digital television networks, by offering valuable, revenue-building services.

The platform provides services for optimal presentation of complex interactive real time video content, for advertisement and an advanced real-time gaming (betting) engine, all linked to the launch of related e-commerce transactions.

MELISA allows ubiquitous multi-modal access to sports events. Content providers will be able to gather an increased user base for their offering. The MELISA system provides additional revenue streams for the sports publishing value chain, by directly facilitating commercial activities over the medium.

MELISA provides a multitude of services related to cross-media sports broadcasting featuring visual enhancements, interactive advertising and sports-related in-play real-time betting services over digital Television and next generation mobile network infrastructures (DVB-S, GPRS/UMTS).

The MELISA system ensures secure transactions within the contexts of betting and e-commerce as well as service subscription, where applicable, in real-time.

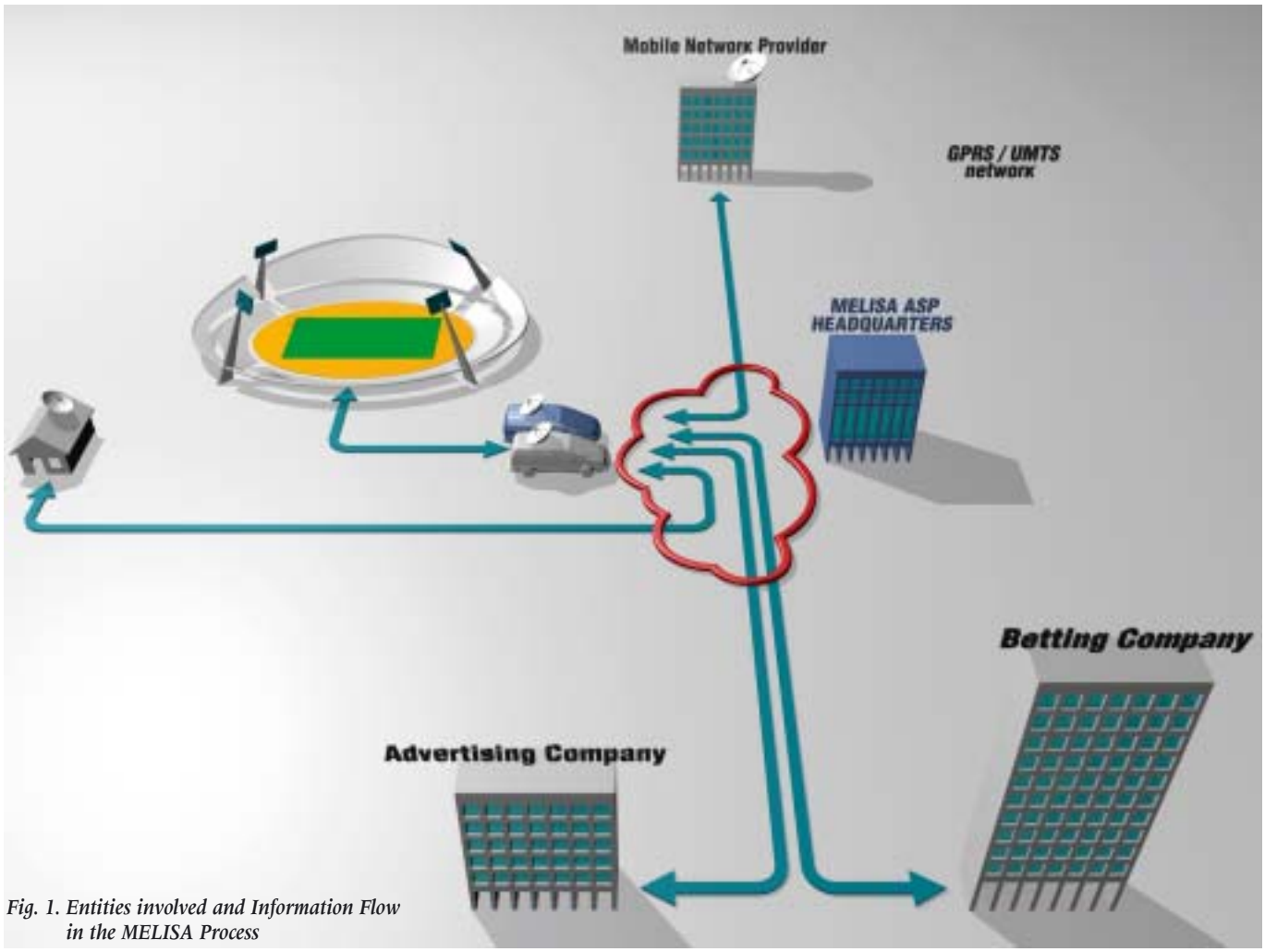


Fig. 1. Entities involved and Information Flow in the MELISA Process

Technical Approach

MELISA provides an End-to-End solution for Authoring, Delivery and Consumption of Enhanced media content in a Multi-Platform environment following the Client-Server paradigm.

Hence a complete Server platform for broadcasters and a novel client platform for viewers/consumers is developed.

The Server platform of the Melisa system provides the infrastructure and the Authoring tools to offer personalised interactive advertisement, e-Commerce, and real-time betting services.

The Receiver Platform offers the viewer Novel set-top-box technology that supports MPEG-2, and MPEG-4 playback for enhanced interactive entertainment.

The MELISA Server

The MELISA system architecture separates the business logic and user interface from the underlying data storage. It has been designed to provide a Platform Independent system for the broadcasting of Sports Events.

MELISA includes a range of Authoring tools for production, encoding and playback of interactive multimedia content in MPEG-4 for a variety of devices over wireless and digital television networks. The Multimedia Production Tools incorporate MPEG-4 and MPEG-7 content creation modules for encoding and transition over DVB.

MELISA provides the infrastructure to support intelligent real time game statistics and enhancements, utilising information from various sources, both historical and during the events. This aims at providing viewers anywhere with valuable information, presented in a natural way, thus increasing their interest in sports broadcasts.

Advertising authoring tools aid the production and placement of dynamic advertisement of sports-related and other products

MELISA supports real time and in-play betting services with its associated m-commerce transaction engine.

The MELISA server allows dynamic scene generation based on predefined templates. Using templates allows broadcasters to prepare their visually enhanced and interactive broadcasts well in advance thus providing this service even during live events.

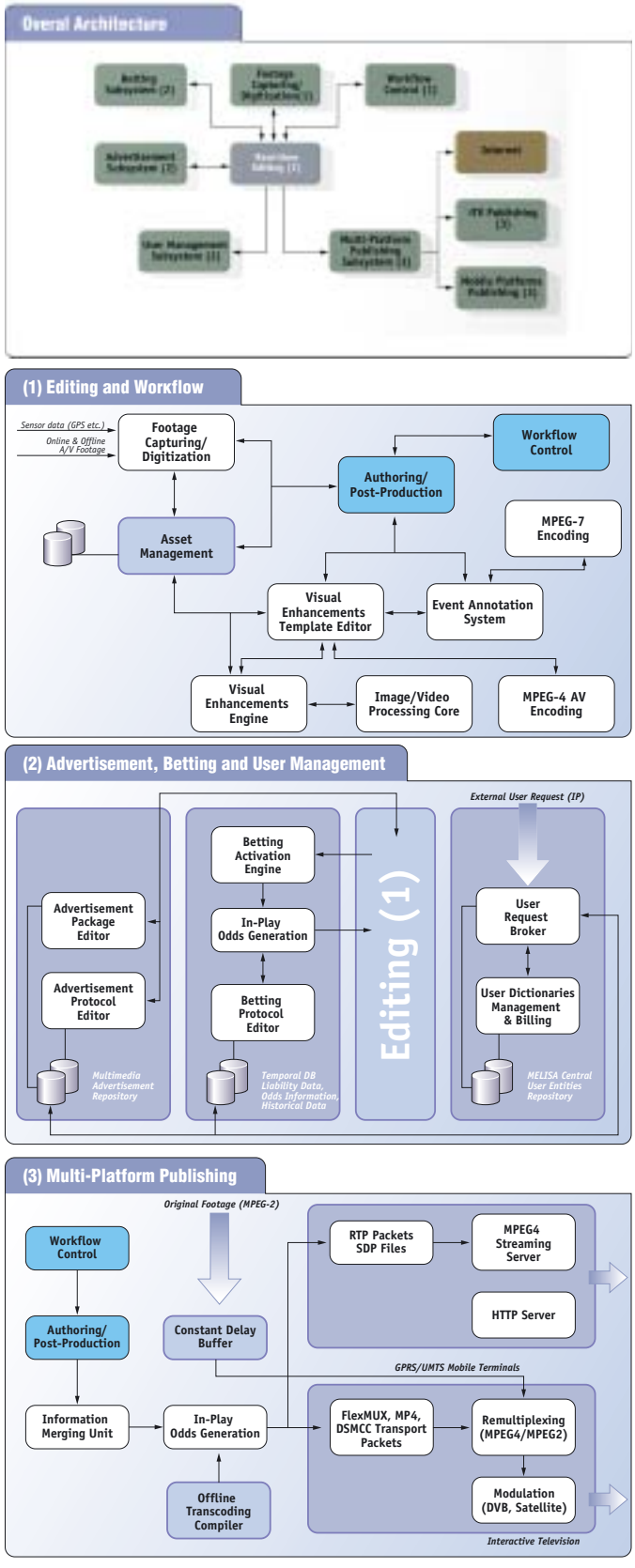


Fig. 2. The MELISA Sender-Side System Architecture and Subsystem Diagrams

The Melisa Receiver Platform

The receiver platforms supported by the MELISA system are high-end Set Top Boxes, Portable Digital Assistants (PDA) and MIDP-enabled mobile phones. The MELISA system provides content adaptation according to terminal capabilities, e.g. adapted interaction, visual presentation in high- or reduced-resolution graphics etc.

The MELISA Set Top Box Receiver Platform offers:

- Personalization of received content and services, according to user or group preferences encapsulated within locally stored profiles. The information is filtered according to these profiles, in order to provide the viewer solely with information that may be of interest.
- Authentication, Transaction initiation, and controlled access are achieved through a secure transmission via a return channel over IP to the MELISA Server.
- The graphic user interface is designed on the basis of advanced usability principles and software ergonomics; it allows the viewer to retrieve information and place bets in a precise manner and interaction sequences easy to comprehend and memorize.
- The viewer is offered the option to fully personalise the viewing environment, as well.
- The underlying core engine provides MPEG-2/4 Demultiplexing and simultaneous display of content in both formats.
- Supports real time and in-play betting services and t-Commerce transactions through secure transmission.

The MELISA PDA/mobile phone Receiver Platform offers:

- Streamed MPEG-4 video playback.
- Playback of downloaded MPEG-4 video content.
- On demand statistical information via naturally overlaid graphical enhancements of the content.
- Personalization of received content and services, according to user or group preferences encapsulated within locally stored profiles
- Supports real time and in-play betting services and m-Commerce transactions through secure transmission.
- The graphic user interface is designed on the basis of advanced usability principles and software ergonomics; it allows the viewer to retrieve information and place bets in a precise manner and interaction sequences easy to comprehend and memorize.

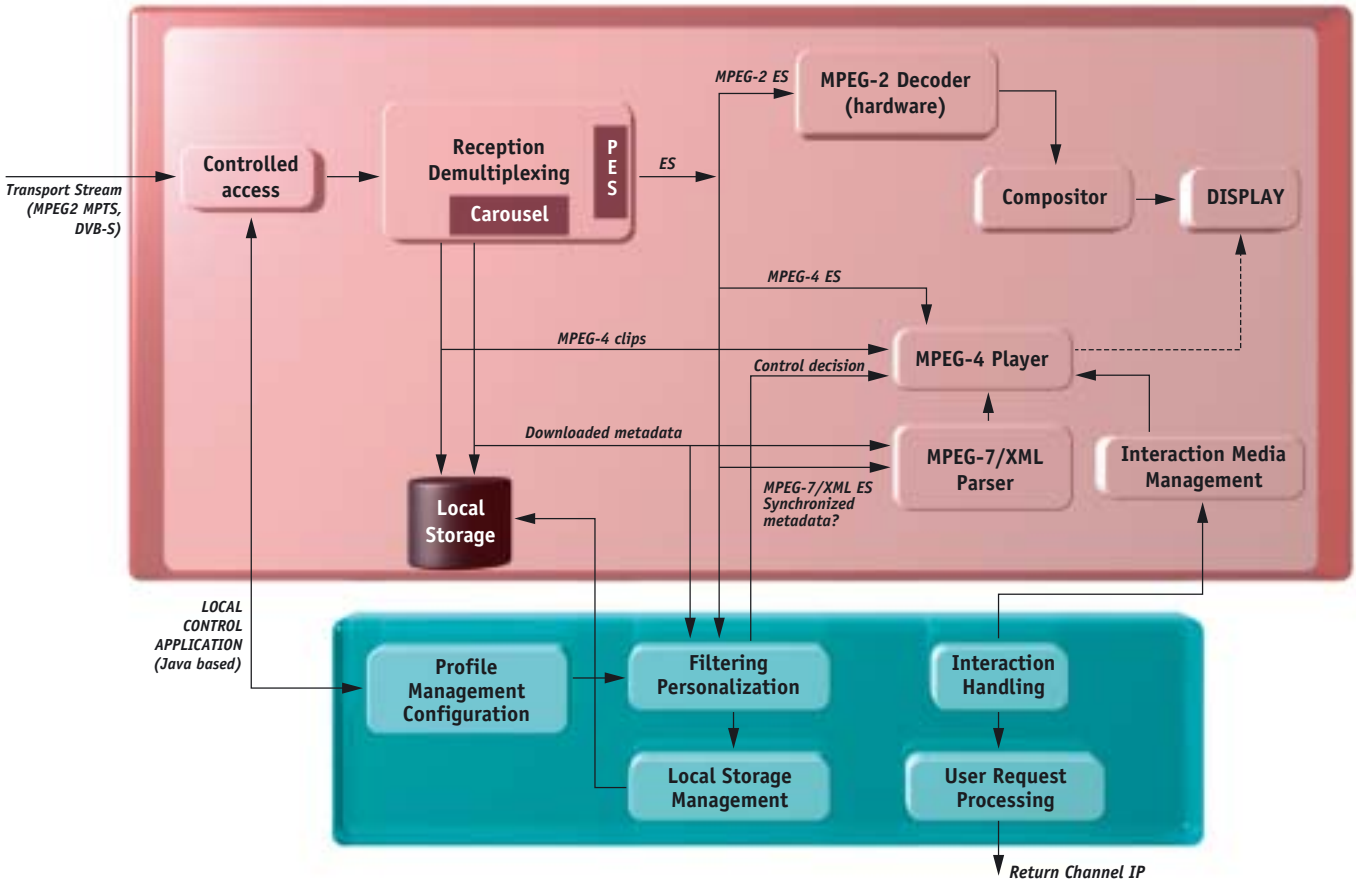


Fig. 3. The High-end MELISA Set-Top-Box Software and Hardware Components

Key Benefits

Broadcaster

Additional revenue streams for the sports

- Multi-platform Publishing value chain, by directly facilitating commercial activities over the medium.
- New novel way of interactive in-content advertising offering an added value easy to use e-commerce system (embedded advertising) thus increasing the effectiveness of advertising by narrowing the gap between advertisement and consumption.
- Increase the subscription base by offering new added value enhanced services to the subscribers with the provision of an innovative low-cost technology.
- Offers the thrill of instant betting via interactive TV and 3G mobile phone.
- Offers a virtual presence in a football game or a horse-racing event that could lead to an increase of on-line betting.

Subscriber

- Profile based filtering offering the viewer control over the received information.
- Advanced On-line Betting environment for an enhanced betting experience.
- The Interactivity and the Visualisation of complementary information offers an enhanced sports viewing experience.
- Ergonomically designed interfaces for turning consumer devices into powerful platforms for interactive entertainment.

Scenario 1

John is watching a football match of his favourite team. A foul has been committed and overlay graphics display the distance from the goal line.

A graphic overlay notifies him that a new bet placement option has become available. Interactive elements on the respective graphics overlays give him the opportunity place a Bet concerning the outcome of the free kick.

He clicks on the statistics label that follows the player to access the available statistics information. He decides to place the bet through the STB remote control. He follows the on-screen instructions and proceeds to place a bet. Upon bet placement and confirmation he receives a notification message that verifies the transaction.

A replay of the Free kick is broadcasted, this time new graphics elements appear on the screen, the player's shirt is highlighted. John selects the player's shirt and an advertisement appears on the screen with the option to redirect him to an e-commerce website for further information and ordering.

Scenario 2

Mark is traveling by train and he decides to view a live F1 race on his 3G wireless computer. He logs in the Melisa service and chooses to watch the televised race watching the normal video feed of the broadcaster.

He clicks on the classification button and the Drivers Classification Panel displays the current drivers positions. Mark chooses the graphical representation mode. In this mode the exact position of all cars, is shown as a graphical representation on a Virtual Track in real time. Visual cues, such as color and car number, show the relative position of the drivers in the track.

Mark clicks on his favourite driver's car to display the available statistical information. He sees the drivers sponsor and he decides to click on the Sponsor's logo to receive further information. This action redirects him the to sponsors e-commerce Web Site for on-line shopping.

Partners

INTRACOM	**Intracom S.A.** http://www.intracom.com	**EL**
OgilvyInteractive	**Ogilvy Interactive S.A.** http://www.ogilvy-interactive.gr	**EL**
ERSIS by SYMAH VISION	**Symah Vision** http://www.symah-vision.fr	**FR**
	University of Essex http://www.essex.ac.uk	**UK**
INTEGRATED LOTTERY SYSTEMS INTRALOT	**Intralot S.A.** http://www.intralot.com	**EL**
cosmote	**Cosmote S.A.** http://www.cosmote.gr	**EL**
UPPSALA UNIVERSITET	**Uppsala Univerity** http://www.uu.se	**SE**
Ladbrokes	**Ladbrokes Ltd** http://www.ladbrokes.com	**UK**
ERT	**ERT - Hellenic Broadcoasting Corporation** http://www.ert.gr	**EL**
	Ondim http://www.ondim.fr	**FR**
TELECOM PARIS école nationale supérieure des télécommunications	**Ecole National Superieure des Telecommunications** http://www.enst.fr	**FR**

Contact Point:
Manos Papaioannou

Intracom s.a.
Hellenic Telecommunications
& Electronics Industry
New Technologies Dpt.

Tel: (+30-210) 6674 877
Fax: (+30-210) 6677 312
Email: paem@intracom.gr

Start of Project:
May 1st, 2002
Duration:
33 months
Project web site:
http://melisa.intranet.gr