

via



Bringing you Eutelsat coverage from around the world.

THE NEWS AT NINE

How EURO BIRD™ 9
is attracting broadcasters

A REVOLUTION IN MOBILE TV
Solaris Mobile gears up for a new age
of broadcast-to-mobile

HD GOES TO THE MOVIES
Cinemas across Europe are opening up
to the versatility of HD

A NEW BROADCAST LANDSCAPE
Arqiva looks at what's shaping the
future of broadcast



September 2008

via
eutelsat



insidevia

September 2008

EDITORIAL

It's almost 18 months since Eutelsat's EUROBIRD™ 9 satellite began service at 9° East. In this issue of VIA we look at how this satellite, located adjacent to our HOT BIRD™ neighbourhood at 13° East, has attracted a significant number of HD channels amongst the 125 already broadcasting across Europe.

Thanks to the growing take-up of dual-feed LNBS, the possibility to target up to 50 million satellite homes equipped for HOT BIRD™ reception has proved a real hit with broadcasters in Europe, and further afield as broadcasters from Asia, Africa and the Middle East look to reach expatriate communities.

In this issue of VIA we also discuss with Steve Maine, CEO of Solaris Mobile, his vision for the future of mobile media that the S-band is poised to deliver, revolutionising the industry in order to meet a growing demand for content and data to hand-held devices.

Arqiva, one of Europe's leading media infrastructure providers and a longstanding Eutelsat partner, also shares thoughts on what's shaping the broadcast industry while Tooway™, our new consumer broadband service shows that satellite sits at the heart of an expanding broadband environment across Europe.

I look forward to seeing you at IBC 2008, and sharing many of the innovations that Eutelsat is spearheading in the broadcast industry.

Olivier Milliès-Lacroix
Commercial Director



03

IN THE NEWS

All the latest from the world of satellite broadcasting, with a brief round-up of Eutelsat's headline news stories.

04

MOVING TV

Solaris Mobile is set to revolutionise the mobile TV market as CEO Steve Maine explains.

05

LINKING UP

SISLink extend their capacity for live uplinks by taking 4000 hours capacity on a range of Eutelsat satellites.

06

EB9 DOING FINE

Into its second year of broadcasting, EUROBIRD™ 9 has attracted 125 Standard Digital and HD channels.

08

ARQIVA INSIGHTS

Arqiva gives us its take on what's changed, and what the future holds for broadcasting.

09

HIGH DEFINITION CINEMA

HD Cinema goes off celluloid and live to events beamed direct from around the world.

10

BY POST AND ON WATER

La Poste in Senegal gets mail by VSAT, while D-STAR is connecting the Sardinian waterworks.

11

TOOWAY™ TODAY

Tooway™, the broadband satellite offering from Eutelsat, ViaSat and Skylogis has a great first year.

12

SIMPLY SUPER

The NHK theatre at IBC2008 will give a glimpse into the future of HD, with demonstrations of Super Hi-Vision.

new

SIGNALS



>> GERMAN HORSE RACING CHANNEL IS A SAFE BET ON EUROBIRD™ 9

BeTVision, a new German horse racing betting channel, launched in May 2008 on Eutelsat's EUROBIRD™ 9 satellite at 9° East. The channel broadcasts live coverage of equestrian events from race venues around Germany and the USA to betting offices throughout Germany.

Over 150 German betting offices are already connected to BeTVision, which uses BISS encryption. Plans are in progress to expand to other countries in Europe. BeTVision operates its own uplink station in Munich to transmit its signal to EUROBIRD™ 9. German technology company Internetagentur Schott, who developed the complete technical solution and oversees service performance, is the technical service provider.

>> MULTICHOICE HELLAS RENEWS CAPACITY WITH HOT BIRD™

MultiChoice Hellas has renewed its satellite capacity contract with Eutelsat and also signed a contract for a fifth transponder. MultiChoice Hellas operates the Nova pay-TV platform, which delivers television, radio and interactive services in Greece and Cyprus to more than 350,000 subscribers. The additional capacity will be activated at the end of 2008 in order to support the expansion of digital pay-TV services, including HDTV.

"Since its launch from our HOT BIRD™ neighbourhood, Nova has emerged as a key player in the Greek broadcasting landscape," Olivier Milliès-Lacroix, Eutelsat's commercial director, said in a statement. "Eutelsat is delighted to partner the expansion of Greece's only pay-TV package through additional capacity on our HOT BIRD™ satellites."

>> ANGOLA PUBLIC TELEVISION LAUNCHES INTERNATIONAL CHANNEL

Angola's Public Television broadcaster (TPA) has launched an international TV channel called Canal Internacional. The channel is available in Sub-Saharan Africa and the European continent via Eutelsat's W3A satellite at 7° East and also in North and South America via Eutelsat capacity on Telstar 12.

Canal Internacional brings together programming from TPA's two national channels in Angola, and its launch will enable a greater coverage of information relating to subjects on the country's political, economic, social and cultural issues. During the launch ceremony in Lisbon on 25 July, Angolan Prime Minister Fernando da Piedade Dias dos Santos praised the initiative, noting that Canal Internacional signifies the country's growth and will help to keep Angolans abroad in touch with national matters.

>> EUTELSAT HELPS ORANGE TV DOUBLE ITS REACH IN FRANCE

Orange has selected Eutelsat's HOT BIRD™ and ATLANTIC BIRD™ 3 satellites to broadcast the TV component of its triple play offer to homes located in areas where it is not available via ADSL. The new satellite service, launched in July, enables the European leader in ADSL to extend the reach of Orange TV to up to 98.3% of French households. This is almost double the 50% of French homes able to receive IPTV via ADSL.

Homes not eligible for TV via ADSL can now install hardware that combines ADSL and satellite reception. A new decoder interfacing with the Livebox enables the satellite-delivered signal to be bundled with Internet access and telephony provided via an ADSL connection. Subscribers to the Orange triple play offer (from 29.90 EUR a month) receive dozens of free channels as well as packages of optional channels. With 24 million homes in France now able to enjoy Orange TV, the launch of the new service will increase its impact in the French pay-TV market.

>> SKY ITALIA ENRICHES ITS SPORT AND HD OFFERS FOR THE NEW SEASON



Roberta Noé and Fabio Tavelli, SKY Sport 24 anchors

SKY Italia, which reached a landmark of over 4.56 million subscribers at the end of June, is adding SKY Sport 24 to its roster of

sports channels. The all-new 24/7 sports network will be produced in the Italian pay-TV platform's new headquarters in Milan, with staff including 70 journalists, 32 reporters, 22 producers and 12 anchors. SKY is also enriching its HD offer for the new sporting season, with over 600 events and 1700 hours of High Definition broadcasting.

Each weekend, the two SKY Sport HD channels will offer five live HD matches from the Italian Football Championship, along with four matches from the UEFA Champions League and four matches from other international championships. Major basketball, rugby, golf, tennis, hockey, baseball and football events will also be broadcast in high definition. Broadcasting exclusively from Eutelsat's HOT BIRD™ video neighbourhood, SKY Italia offers over 170 digital channels.

the view from ABOVE >>



Solaris Mobile takes mobile TV to new heights

Two of Europe's biggest satellite players, Eutelsat and SES Astra, have combined forces for the first time, in a unique joint-venture called Solaris Mobile

Solaris Mobile is set to develop and deliver enhanced mobile TV services, with the aim of revolutionising the global broadcast-to-mobile marketplace. Steve Maine, Solaris Mobile's CEO, tells us why he believes the time is right for mobile TV and how Solaris Mobile can meet the needs of players looking to address this market.

Why do you believe there is a demand for mobile TV?

Steve Maine: Across Europe, there is an increasing demand, driven by consumers, to receive broadcast TV, multimedia content and data on mobile devices. It's true that the idea of mobile TV has been talked about for several years, but the reality is that it's only now that the sophistication of mobile use has exceeded mere telephony: you see people putting music and photos on their mobile phones, and using them to surf on the Internet. For example, look at the take-up in the use of Smartphones such as the Apple iPhone or the Blackberry. There is a pan-European marketplace that we believe is truly ready to go to that next stage and readily access mobile broadcasts and data on a large scale.

Other satellite phone services such as Globalstar or Iridium already exist. Why will Solaris Mobile be different?

Steve Maine: Solaris Mobile's proposition has a mass-market appeal. Our own satellite will have a larger antenna and more power than other satellites, and power will be concentrated into specific areas. People will be able to receive high quality TV signals on small mobile phones and other devices. Solaris Mobile's offer represents a quantum leap in technology and will open up cost-effective, readily-available TV options for people on the move.

Which European markets will be your priority targets?

Steve Maine: The regional markets are virtually limitless: The S-band payload of the W2A satellite, which will deliver the service, is combined with six regional beams offering broad coverage of Europe, including France, Germany, Italy, the UK and Ireland, Spain, Portugal, Poland, the Czech Republic, Benelux and many other extended regions of Europe. In terms of market sectors we will primarily be targeting the media industry, telco operators, the automotive industry, and data and communications providers.

Who do you expect to partner with?

Steve Maine: Our objective is to build partnerships with mobile handset manufacturers, terrestrial network providers, distributors and content providers. Regarding Mobile Network Operators, if they buy into our world view, where we envisage a very significant mass-market opportunity, then they will be quick to see the value of what we're doing and will be happy to interact with their networks. I'm very confident about our competitive offer. We will enter the marketplace at an affordable price point and will be looking at low-level increments, which should appeal.

What makes S-band so attractive?

Steve Maine: There are only very limited terrestrial frequencies to meet the growing demand for mobile TV. The S-band frequency, which is adjacent to the 3G spectrum, provides an ideal solution for mobile TV services. By combining satellite coverage with terrestrial transmitters, there will be an economical and versatile range of services available to meet the growing demand for two-way and interactive broadband media to handheld devices.

Why have you chosen Ireland and Dublin to setup your corporate headquarters?

Steve Maine: Following a detailed assessment of a number of locations across Europe we decided that Ireland would be the best place to deliver this project. Ireland has shown a willingness and ability to meet the tight deadlines required, whilst ensuring its successful development to the most stringent standards. We are very happy to be in Dublin and welcome the levels of cooperation we have received.



Steve Maine, with Mary Coughlan, Ireland's Minister for Enterprise, Trade and Employment, welcomed the opening of Solaris Mobile at an official ceremony in Dublin

For more information on
Solaris Mobile contact:

mail@solarismobile.com

www.solarismobile.com



Linking up for 4,000 hours

SISLink is expanding its service capabilities with increased capacity, enabling it to meet the growing demand for live sports and news coverage

SISLink is one of Europe's largest suppliers of satellite uplinks, providing services to a wide range of news, sports and outside broadcasting organisations. They have recently signed a new contract with Eutelsat for 4,000 hours of capacity in average 9MHz slots on a range of Eutelsat satellites.

The move equips SISLink with the ability to meet growing requirements from agencies and broadcasting organisations to provide TV coverage of leading sports and breaking news events. Capacity will be made available on request to SISLink on a real-time basis, via Eutelsat satellites providing reach across Europe, the Middle East, North Africa and central Asia. Uplinks in both Standard Digital or HD will be delivered back to SISLink's teleports in the UK.

SISLink has also renewed its contract for four Ku-band transponders on the Telecom 2D satellite commercialised by Eutelsat. This new multi-year contract ensures that SISLink continues to access capacity in inclined orbit with strong reach over Western Europe.

SISLink is a major satellite broadcast company with a fleet of over 100 uplinks developed, enhanced and maintained in the UK, France,

Ireland and Italy for immediate deployment in the field. SNG vehicles provide all-in-one editing and uplinking facilities, multi-camera facility and professional audio mixing functions. The company is also expanding its fleet of HD uplink trucks and fully-equipped flight-cases designed for integration, compression and monitoring of HD services.

David Meynell, Managing Director of SISLink commented on this latest development; "We have worked with Eutelsat for many years now, buying both adhoc capacity and fixed long-term satellite leases. I am very pleased that we can now increase our annual commitment by signing this minimum capacity contract and I look forward to many more years of successful transmissions of major events for our customers utilising Eutelsat's satellites".

Eutelsat has partnered with SISLink for the overwhelming majority of the key events it has covered for broadcasters since 1989. Olivier Milliès-Lacroix, Eutelsat Commercial Director commented. "Flexibility, responsiveness and choice are key features SISLink needs from a satellite operator. We are fully committed to continuing to tick all these boxes and to support a video activity which is an essential component of the broadcasting chain."





One Year On at Nine Degrees East

Beginning service at 9° East in May 2007, EUROBIRD™ 9 has had an exceptional first 18 months of activity, with over 125 channels now broadcast from Eutelsat's newest video neighbourhood

In spring 2007, Eutelsat announced the opening of a new video neighbourhood with EUROBIRD™ 9 at 9° East, adjacent to the premium HOT BIRD™ position at 13° East. This new position was developed to enable thematic, regional and local TV channels and HDTV to tap into the already established audience of over 50 million DTH homes in Europe, North Africa and the Middle East at the neighbouring position.

EUROBIRD™ 9 delivers 20 fully operational Ku-band transponders supplying coverage across Europe, North Africa and the Middle East. Reception from EUROBIRD™ 9 is possible using off-the-shelf dual-feed satellite dishes, which, together with channels from Eutelsat's prime HOT BIRD™ neighbourhood gives viewers access to up to 1200 channels.

A definite winner with HDTV channels

When Eutelsat's vision for EUROBIRD™ 9 was being developed, at the heart of the offer was its appeal to the ever-burgeoning number of HDTV channels launching across Europe. So it has proved, with channels such as: M1 Magyar, Hungary's national

public channel, Luxe TV, an HD channel exclusively dedicated to all things luxurious; and Melody Zen, a unique and innovative well-being channel. These are just a few of the 12 HDTV platforms currently using EUROBIRD™ 9 as an economical means of broadcast to a vast potential audience.

As well as providing a platform for HD channels, EUROBIRD™ 9 is also proving popular with thematic channels and with platforms reaching expatriate communities. Here we take a look at some of the latest European platforms to benefit from broadcasting via EUROBIRD™ 9, and also at how broadcasters in Asia are utilising this strategically positioned satellite to target ethnic communities.

From Russia in HD

Launched in August 2008, Platforma HD delivers popular international channels such as National Geographic HD and Eurosport HD, as well as two Russian channels, HD Life and Kinopokaz HD. Platforma HD is available in the European part of Russia on a subscription basis via DTH reception or through cable operators.

Hello to HDTV: a first for Hungary

Launched in May 2008, Hello HD is Hungary's first HDTV platform, broadcasting industry-leading HDTV services that include Eurosport HD, National Geographic HD, Filmbox HD and HBO HD. These international TV brands are complemented by high quality Hungarian channels broadcasting in Standard Digital.

Using two transponders leased on a long-term basis on EUROBIRD™ 9, Hello HD is available to viewers on a subscription basis using CONAX encryption. Subscribers purchase a High Definition set top box, which enables HD and SD reception based on the DVB-S2 standard. The set top box is also equipped with a PVR (Personal Video Recorder) and VOD (Video on Demand) features. Plans are now in place for the launch of VOD services towards the end of 2008, together with a range of value added interactive services.

Andras Schmideg, Hello HD's CEO, said of the platform's success on EUROBIRD™ 9; "Due to its advantageous position and its high technical service quality, EUROBIRD™ 9 represents a first class choice for DTH service providers in Central and Eastern Europe. Its co-location



>> ASIAN NATIONS TARGET ETHNIC COMMUNITIES IN EUROPE VIA EUROBIRD™ 9

EUROBIRD™ 9 now enables countries in Asia, Africa and the Middle East to reach out to expat communities across Europe

Give me Five!

Today, Europe has a Cantonese-speaking population of half a million people. Television Broadcasts Ltd (TVB) of Hong Kong selected capacity on the EUROBIRD™ 9 satellite to target this audience with the launch of The Chinese Channel, a new multi-channel digital platform of Chinese-language channels for satellite homes across Europe.

The Chinese Channel offers a line-up of five of TVB Group's flagship infotainment channels including TVBS-Europe, which specialises in Hong Kong drama series, local news and Chinese community events in Europe. It also comprises four specialist channels launched at the beginning of 2008, namely: TVBN, a 24-hour Hong Kong and global

news channel, TVB Entertainment News, which focuses on entertainment news from Hong Kong, Korea, Japan, Taiwan, Europe and the USA, TVB Classic which shows nostalgic content, and TVB Lifestyle which specialises in fashion, travel and dining. The Slogan 'Give me Five!' sums up the offering!

Going back to its Roots

Roots Global is a pan-European DTH platform targeting communities from South Asia, of whom there are approximately 4 million (Source: Eutelsat 2006) in Europe, the Middle East and North Africa.

The initial launch phase began with five mini platforms, targeting expats from the Indian subcontinent, India, Sri Lanka and Nepal. Commercial operations for this first phase began in July 2008, with more platforms planned to address ethnic minorities in Europe from the Far East.

Roots Global has secured three more transponders on EUROBIRD™ 9 with the aim of growing to 100 channels by December 2009.

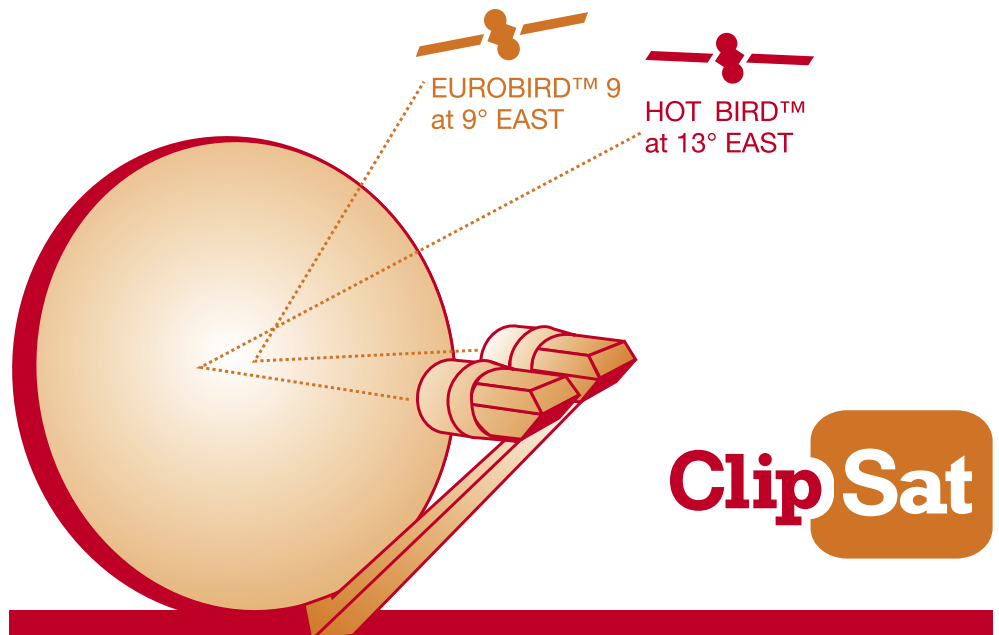
with the HOT BIRD™ satellites provides us with the opportunity of simulcrypting a high number of key pan-European thematic TV channels, Hungarian language channels, and important HDTV programmes into a versatile programme package for our subscribers, whom we provide with dual LNB satellite receivers. Furthermore, Hello HD receives daily support from Eutelsat on marketing, technical or sales matters."

Tele Columbus marks a digital milestone for Germany on EUROBIRD™ 9

Tele Columbus, Germany's third largest cable operator broadcasting to about three million homes now offers a unique platform on EUROBIRD™ 9, together with Eutelsat KabelKiosk, bundling digital channels and services for German cable homes.

The joint enterprise is a milestone in accelerating the transition of Germany's cable market from analogue to digital. The new platform launched in May, starting with two transponders, but Tele Columbus ultimately plans to ramp up to four transponders hosting more than 50 digital channels and services.

The establishment of the new platform on EUROBIRD™ 9 marks a further important step in Tele Columbus' development from an infrastructure provider to a customer-centred telecommunications and multi-media provider.



>> CLIPSAT™ EASILY ENABLES DUAL-FEED RECEPTION

Viewers upgrade their existing equipment to receive channels from 9° East by fitting a second LNB beside the one already pointed to the HOT BIRD™ neighbourhood, using mono-feed units, or LNB extensions. A simple solution for viewers who already have an antenna

receiving HOT BIRD™ channels is to add CLIPSAT™ to their existing set-up. Developed by Eutelsat, CLIPSAT™ is an additional LNB that clips to an existing LNB with a single screw, enabling dual-feed reception without needing to re-point the antenna.

broadcast BITES >>

Arqiva looks to the future of broadcasting

Mark Cronin, Business Development Director of Arqiva, gives his insights on the changing face of broadcasting



Mark Cronin, Business Development Director, Arqiva

Based in the UK, Arqiva provides media content management and global distribution services across Europe and the USA. As one of Eutelsat's key retailers of satellite capacity, VIA talked with the company's Business Development Director, Mark Cronin, to get his perspective on the state of the broadcast market and to determine what they see as the challenges for the future.

VIA: How has the broadcast market evolved in recent times?

Mark Cronin: There have been many changes in the broadcast market over the last few years, but there are four key areas that I would identify as really shaping the dynamic of the industry today. Firstly, there has been an increase in niche broadcasting, secondly there are now many more DTH platforms as a result of digitisation, thirdly broadcasters are utilising new ways to maximise revenue from TV and finally, due to multiple platforms, rights negotiations are more complicated.

VIA: Why has there been such a rapid development of niche channels?

Mark Cronin: Niche channels are those dedicated to a specific and specialised target market, for example film or shopping channels, or they can be subject-specific such as RUSH HD or URBAN TV. The rapid development of these channels is driven by the falling costs for launching and running a TV channel, which makes it economically viable to target a specific market. The ability to economically distribute and re-purpose content internationally helps to open up the specific target market. Advertisers like niche channels as it allows them to target very specific audiences more efficiently.

VIA: How about the increase of DTH platforms?

Mark Cronin: Digitisation, coupled with more satellite capacity, has decreased the cost of launching a platform or a TV channel, and consequently fewer subscribers are required to make a profit. Furthermore, knowledge of how to launch a successful platform/channel has greatly increased. Arqiva published 'How to Launch a TV Channel' to help broadcasters start a TV channel and initiatives like this make it easier than ever to launch a platform/channel. In recent years, the DTH market has seen particular growth in emerging markets such as Central and Eastern Europe where there is a high demand for content. More DTH platforms mean TV channels have more places where they can earn revenue. Therefore there has been an increase in TV channels wanting to re-purpose content to take advantage of new DTH platforms in new markets.

VIA: How are broadcasters re-inventing their business models?

Mark Cronin: As well as the more traditional models for making money, such as public service TV and TV advertising, new revenue models play an increasingly significant role in turning a profit. One of them is subscription-based television services, of course, which have existed for a while, but also participation TV, where viewers can vote by phone or text in a reality TV show for example, or interactive TV, which is driven by the availability of interactive gaming via the television set. This can be viewer vs. computer games or games involving the whole audience such as bingo or poker. Last but not least, Video on Demand (VOD) is another new revenue model. VOD enables viewers to load content onto their

personal video recorder or PVR which they can watch whenever they want, satisfying the demand for a growing 'here and now' viewing culture.

VIA: What do you see as the issues with rights negotiations?

Mark Cronin: Rights negotiations have become more complex for the content industry due to the increase in available DTH platforms and the increase in alternative media platforms such as BBC iPlayer.

VIA: What are the main challenges for the future?

Mark Cronin: The key challenge for the future of the TV broadcast industry is integration with the online world to meet the growing culture of 'here and now' content viewing. Online set top boxes (ADSL to box to TV) will ultimately end up in the living room and the broadcast industry needs to embrace this change. The Internet enables people to get 'what they want, when they want it' and this expectation is now emerging in the realm of TV viewing. Broadcasters have a real opportunity to satisfy this demand and provide a better service by maintaining and enhancing the 'family' viewing experience. This will involve the evolution of hybrid TV services that operate symbiotically with ADSL and IPTV.

A further challenge will be to ensure the efficient management of satellite space segment. There is a real need to ensure that satellite slots are utilised in a meaningful way and don't become fragmented and therefore less efficient.

arqiva

From NY to FR in HD

CielEcran brings live performances from New York's Metropolitan Opera to cinemas in France

CielEcran, a company that specialises in broadcasting cultural, television and sports events to large screens in France, recently took capacity on two Eutelsat satellites to broadcast live, High Definition performance transmissions direct from New York's Metropolitan Opera to cinema complexes.

On 5 April a live satellite broadcast of Puccini's *La Bohème* from the Metropolitan Opera was beamed into 17 cinemas across France, followed on 26 April with a live HD transmission of "La Fille du Régiment" by Donizetti. Following on from these successes CielEcran, in partnership with France Musique, will now broadcast the entire season of Operas from the Met in about 20 cinemas across France, from 11 October 2008 to May 2009.

This will be just the latest in a series of exceptional events transmitted to cinemas by CielEcran, enabling the public to experience event programming that includes ballet, comedy and pop concerts amongst others, with exceptional video and audio quality.

"CielEcran is trailblazing a new activity in France to deliver alternative HD content to large screens in cinemas and auditoriums," says CielEcran's Managing Director Marc Welinski. "These transmissions are now possible because of advances in digital technology, the availability of high-power satellites to transmit the HD signal and the increasing deployment in theatres of new HD projection systems."



HD on the Silver Screen

Cinemas are looking at new ways to entice people out of their homes and back into the theatres, and HD cinema is set on creating an entirely new cinematic experience

Cinemas have always been the preserve of film, whether Hollywood blockbusters or European art house. But now HD Cinema is opening up new possibilities, both for cinema owners and the viewing public, who are prepared to try out new experiences that aren't necessarily set in celluloid. In Italy, Skylogic, Eutelsat's broadband subsidiary, is working with Microcinema, a company that provides services for the distribution, management and projection of cinematographic and audiovisual content by satellite.

Unlike traditional film distribution channels, Microcinema sends content to a server via satellite, which cinemas can purchase from an online catalogue. Their first real venture into alternative screenings came in 2007 with live events including the opening opera of the 2007/2008 season at Milan's Teatro alla Scala, broadcast in HD for cinemas to show in real time. Opera in particular has proved a real success and Microcinema will show recorded and live events from September onwards. Microcinema currently has 50 cinemas operative in Italy, rising to over 80 by 2009.

Satellite multicast distribution drastically cuts costs

Microcinema uses Skylogic's D-STAR service to provide two-way broadband access to cinemas around Italy. Content is stored at Microcinema's Datacenter in Turin and transmitted terrestrially to Skylogic's SkyPark teleport, where it is uplinked to Eutelsat's EURO-BIRD™ 3 satellite and multicast to cinemas equipped with a 96cm D-STAR antenna and indoor unit. Satellite multicast distribution drastically reduces the operating costs of traditional distribution methods, making programming more flexible and accessible and considerably extending film coverage to cinemas in areas with no terrestrial broadband access.

Venice Film Festival

Microcinema hosted a conference at this year's Venice Film Festival entitled: *An overview of digital cinema: flexible, interoperable, affordable*. The conference presented a case to filmmakers from around the world that HD Cinema is the future for the industry, in terms of flexibility for cinema

Eutelsat supports Cinémascience

A place to rendez-vous for scientists and filmmakers

Eutelsat is partnering with the CNRS (France's national research agency) for a new film festival called 'Cinémascience', which takes place in Bordeaux, France from 18 to 26 October.

The Cinémascience festival brings together filmmakers and scientists who share a commitment to creativity, imagination and pushing back the boundaries of human achievement. Eutelsat is closely collaborating with the CNRS for the day, which is devoted to Italy's rich and diverse cinema industry.

For more information visit:

www.cnrs.fr

owners, interoperability, with every type of video output utilised, and affordability, where the digitisation of film makes the art of film more reachable, useful and efficient.

broadly

SPEAKING



VSAT puts its stamp on La Poste in Senegal

Senegalese Postal Service uses VSAT to connect remote offices, via Eutelsat's W6 satellite

The Senegalese Postal Service has connected 165 post office establishments throughout the country via a VSAT network, using Eutelsat's W6 satellite at 21.5° East.

The Virtual Private Network (VPN) supports an independent telecommunications network for voice, video, images and data. Linking the head office with regional delegations, finance centres and post office outlets, Senegal's postal service aims to improve the speed and efficiency of customer services and reduce internal communication costs.

Each postal service site is equipped with Internet/VPN access, PCs, fax and IP

telephones. The network, which is one of the most extensive in Senegal, enables telephony, audio-conferencing and video-conferencing, distance learning, IP multicasting, and Internet services.

Eutelsat's W6 satellite was chosen for its coverage and availability of the connection across urban, rural or isolated areas. The centralised network uses Ku-band satellite capacity, reducing the size of antennas required at the sites, and is managed via a TDMA hub in Dakar. The VSAT installations are quick to deploy and have identical infrastructure costs for each site, however remote the location.



Over the water

Sardinia turns to satellite to monitor and control water supplies

The Sardinian agency Ente Acqua della Sardegna (ENAS), which is responsible for managing waterworks and water regulatory affairs across the region, has selected Skylogic's D-STAR two-way broadband service for monitoring and remote control of Sardinia's water system. In order to set in place a fully secure remote and automatic communications infrastructure across Sardinia, ENAS has worked with IcarusNet to extend an initial network of 14 D-STAR terminals with 16 new terminals located at hydro-electric dams, viaducts and reservoirs.

Data transmitted from the sites includes water levels, pump performances and energy production, while control commands can also be sent, thereby eliminating any need for human intervention on site. Maurizio Bonetti, project manager for ENAS, commented on the expansion of the network; "We are extremely satisfied with the scalability of the D-STAR solution and the easy interface with our existing terrestrial network. We are now looking at further extending remote monitoring and control of installations across Sardinia by satellite."





Tooway™ is on its way

In its first year, Tooway™, a unique service from Eutelsat, ViaSat and Skylogic that delivers consumer satellite broadband, has taken off across Europe

Launched in late 2007, the Tooway™ broadband satellite service has already developed a broad network of distributors across Europe including in Germany, Italy, Spain, UK, France, Switzerland, the Baltics, Bulgaria, the Balkans, Ukraine and Turkey.

Providing consumer satellite broadband comparable to ADSL, both in terms of cost and speed, the service uses Ka-band capacity on Eutelsat's HOT BIRD™ 6 satellite and Ku-band capacity on the EUROBIRD™ 3 satellite. Consumer equipment for the service comprises a compact satellite dish and modem. The unique technology is based on the SurfBeam® DOCSIS® broadband satellite system developed by ViaSat, a world leader in innovative satellite broadband services, and already widely deployed in North America with more than 400,000 users since its launch three years ago.

The first take up for Tooway™ comes from telecommunications operators and regional institutions, demonstrating the widespread confidence in Eutelsat's KA-SAT satellite, which is to be launched in 2010. KA-SAT will be an engine for growth in broadband markets. The

first fully-dedicated multi-spotbeam Ka-band satellite in Europe, coupled with the DOCSIS® technology and a network of gateways in eight countries, will be able to support over one million homes.

Tooway™ consumer broadband for homes located at the edge of terrestrial networks is typified by the service now offered by Swisscom, the first national telco operator to sign up to Tooway™. Swisscom selected Tooway™ as part of its far-reaching universal broadband programme for all Swiss households.

Bridging the digital divide in Germany

TelDaFax Communications GmbH is the latest distributor in Germany to select Tooway™, marketing it under the brand name: *all DSL* via its own multiple distribution channels. The service is provided to TelDaFax Communications via Ku-band capacity on EUROBIRD™ 3 with the Ku-band hub operated by Skylogic from its state-of-the-art SkyPark teleport in Turin, Italy. TelDaFax is also working on VoIP as an add-on to the broadband service.

"There are more than 1,000 ADSL-free areas nationwide in Germany," observes Rolf Diederichs, Managing Director of TelDaFax. "We have very carefully watched and tested all existing satellite two-way solutions and other technical alternatives. The high-performance and scalability of Tooway™, its infrastructure and the future options with the upcoming launch of Eutelsat's powerful KA-SAT satellite convinced us to work with Tooway™ in order to bridge the digital divide in Germany, where satellite is the only route to broadband for more than a million homes."

Broadband for everyone in Piedmont

In order to develop its WI-PIE programme (Wireless Piemonte), the Piedmont Region in Italy, in collaboration with CSI-Piemonte, TOP-IX, CSP and IRES, has committed to providing broadband connectivity within its territory for all citizens by the end of 2008. Tooway™ will complement ADSL and terrestrial wireless technologies in order to achieve full broadband coverage for all 1,206 communities in the region, for consumers and commercial enterprises.

Super Hi-Vision delivered by satellite for the very first time

One of the highlights at IBC this year will be a new demonstration of Super Hi-Vision

History tells the many tales of rival companies competing over formats to capture the consumer market with a new technology. With Super Hi-Vision however, there seems to be a consensus approach in avoiding costly competition and duplicating efforts in the search for what will ultimately lead to next-generation HDTV. This year's IBC2008 demonstrates this creative cooperation, when some of the world's leading technology companies, broadcasters and facilitators, including Eutelsat, get together to demonstrate Ultra-HD in Amsterdam.

Super Hi-Vision was developed by Japanese public broadcaster NHK. The picture resolution is four times that of HD both horizontally and vertically, currently with 60 progressive frames a second. Audio is 22.2 channels: nine channels at ceiling height, ten channels at the centre height of the screen, three front channels at foot height, and low frequency effects channels at the front.

Super Hi-Vision at IBC2008

The IBC theatre contains a 6.95 diagonal projection screen and full audio system with demonstrations running throughout the entire show. They will bring live pictures and pre-recorded content from remote locations into the demonstration theatre in Amsterdam, and show how satellite's wideband capacity makes it the most suitable media to deliver super-high-vision to the home. With a native digital signal of 24Gb/s, a major part of the challenge has been in developing compression schemes that will allow Super Hi-Vision to be transported.

Part of the content comes from a server at the research headquarters of Italian public broadcaster RAI in Turin. This is compressed using MPEG-4/H.264, using 16 encoders in parallel, to around 140 Mb/s and delivered over two full satellite DVB-S2 transponders using 8PSK 5/6 modulation and LDPC coding, via Eutelsat's ATLANTIC BIRD™ 3 satellite – the first time that Super Hi-Vision has been delivered internationally via satellite!

Live from London

Another first at the show is the international delivery of pictures over an ultra-broadband fibre. NHK's Super Hi-Vision camera, installed on a high building next to the river Thames, will be feeding its pictures live into the Amsterdam demonstration, this time in 600Mb/s MPEG-2.

As well as being shown on the 8k x 4k projector in the NHK theatre, the demonstration is also displayed on the Eutelsat stand, down-converted for viewing over a professional 56" 4k LCD screen.

Research into Super Hi-Vision will allow the primary partners: NHK, RAI, BBC, EBU, to interrogate the technologies to determine how they can best be used. Dr Keiichi Kubota, Director General of NHK Science & Technical Research Laboratories, explains; "NHK's goal is to make Super Hi-Vision a reality that can be enjoyed in every home. We estimate that it will take approximately 10 years to establish the technical foundations and a couple of years for the standardisation. However, the applications of Super Hi-Vision other than broadcasting, such as public viewing or theatres, will be utilised much earlier."

>> HOT BIRD™ TV AWARDS

On 14 November, the 11th edition of Eutelsat's HOT BIRD™ TV Awards takes place. The HOT BIRD™ TV Awards is a unique European event shining a spotlight on the creativity and innovation of thematic channels. This year's event has once again received well over 100 entries from thematic channels broadcast in Europe via Eutelsat satellites. Their applications will be viewed by an international jury of media experts who will meet in Venice in September to select three nominees for the 11 thematic categories.

For more information:

www.hotbirdtvawards.com

>> EXHIBITIONS CALENDAR

Alger Telecom / 12-15 Oct / Algiers
www.alger-telecomp.com

Mipcom / 13-17 Oct / Cannes
www.mipcom.com

CASBAA / 27-30 Oct / Hong Kong
www.casbaa-convention.com

GSM Africom / 18-19 Nov / Cape Town
www.comworldseries-africa.com

Actionaria / 21-22 Nov / Paris
www.actionaria.com

VISIT
www.eutelsat.com

Eutelsat Communications

www.eutelsat.com
infomaster@eutelsat.fr

70, rue Balard
F-75502 Paris Cedex 15

tel +33 1 53 98 47 47
fax +33 1 53 98 37 00



eutelsat
COMMUNICATIONS