

# TVBEUROPE



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Richard Dean examines BSkyB's newsgathering investment

## Sky News poised to hasten news revival

### Tapeless migration

Big changes are afoot at Sky News following the decision to migrate newsgathering systems worldwide to tapeless Panasonic P2 acquisition, Apple Final Cut Pro (FCP) editing, and Streambox contribution links.

According to Bevan Gibson, head of Future Technology at BSkyB, the move follows intensive evaluation of available equipment, and promises what appears to be a win-win-win solution – faster turnaround time, inbuilt HD-ready capability, and lower costs.

“Despite being HD native, FCP is cheaper than our existing Avid software by an order of magnitude,” said Gibson. “This will allow us to equip all crew with their own system, which apart from higher productivity means the equipment is better looked after than pool kit.”

However Sky resisted any temptation to make the FCP laptops perform other tasks. “We still use personal Blackberry PDAs for emails – it wouldn't be practical to have somebody leaning over the shoulder of the editor waiting to send an email,” said Gibson,



Reporter Dominic Waghorn filling for Sky News: “Probably the commonest objection to P2 is the cost of the cards, but we are in a good position to control the circulation of cards among our crews,” said Bevan Gibson

adding that FCP's large user base reduces the training overhead. “They teach FCP in universities these days,” he noted.

The decision to back HD-switchable P2 camcorders follows some seven years of loyalty to Sony cameras, and trials with other tapeless options such as the Avid/Ikegami FieldPak. “We felt that the P2 workflow offers the closest fit to our operation, and are very happy with the performance,” says Gibson. “Probably the commonest objection to P2 is the cost of the

cards, but we are in a good position to control the circulation of cards among our crews, who will most likely use a stock of about 10 each when working out of one of our news bureaux for instance.” Gibson concedes that more may be allocated within busy urban environments.

Sky has opted for Panasonic's professional AVC-Intra compression system, which with H.264 MPEG-4 compliance is claimed to halve the bandwidth of older

→ Continued on page 3



Technological roots: The new product concept consists of GFCam; GFStation content management; and GFPak removable media record

## Take the flash road

### NAB Wrap-Up

With its technological roots in Ikegami's Editcam systems and Toshiba's long experience of using flash memory in video server applications, those two companies have agreed a collaboration pact that will see the creation of a new tape-less production and editing system using semiconductor flash memory for storage. It will be launched at NAB 2008, writes **George Jarrett**

Promising new levels of workflow innovation that produce savings in time and cost in all aspects of video production, Ikegami and Toshiba chose to adopt flash memory because it is the ‘best overall solution’. The plus factors they quoted are: no moving parts, resilience to wide temperature fluctuations, and good impact and vibration resistance.

Better still, flash memory will increase in density as it crosses from consumer to professional applications, and the media supports re-write cycles in the order of tens of thousands.

The product concept — a highly featured, integrated system

that seamlessly connects all elements of production workflow between acquisition and transmitting cut programmes — consists of three elements at the prototype stage. They are the hybrid tape-less camera system GFCAM; the central content management and recording system GFSTATION, based on flash memory; and, the removable medium GFPAK, which records all image and audio data. There is a portable version of GFSTATION as well.

GFPAK, based on flash memory, is the key factor. It is expected to store up to 128 minutes of HD at launch — there will also be an HDD

→ Continued on page 4

### NAB 2007 Analysis

You didn't actually need to be there, because *TVBEurope* tells you everything that happened! This issue, turn to page 24 for our very special 18-page NAB Wrap-Up section — featuring George Jarrett and Ken Kerschbaumer on acquisition; Jonathan Higgins discussing contribution; and Dick Hobbs' incisive analysis of operations and infrastructure highlights from the show. — *Fergal Ringrose*

## Industry Trends Survey 2007

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# Perfect timing for HD Masters 2007 event

Don't miss out on premier high definition event

By Fergal Ringrose

## Conference Preview

With the confusion in the UK over terrestrial spectrum, the HD Masters 2007 conference (June 25-26) could not be more timely. It seems Ofcom is determined to auction off analogue bandwidth to the highest bidders after the UK's analogue switch-off. This is despite a vigorous campaign from the HDforALL consortium that backs the addition of HD on the Freeview platform, and highly vocal backing from the likes of Mark Thompson (BBC DG) and Michael Grade (ITV CEO).

HD Masters 2007 will be covering terrestrial HD and the availability of spectrum at the time when Ofcom still has its 'Digital Dividend Review' underway. Whilst there is a recent sense that Ofcom's position was moderating in favour of satisfying network broadcaster's requests, delegates will also know



that at the same time Shaun Woodward, the UK government's broadcasting minister, recently said that there would be no special treatment for terrestrial networks seeking gifted capacity for HD transmissions — and expressed a view that mobile TV was more important.

Greg Bensberg, Ofcom's principal advisor on broadcasting, and Simon Fell, ITV's controller of emerging technologies (and an enthusiastic supporter for HD on Freeview) will be amongst those discussing this in-depth at HD Masters 2007. Other expert speakers

will also debate this hottest of hot topics, and whether the proposed Freesat plan, backed by Britain's public broadcasters, can fill this gap.

**Value Added Session:** An exclusive lunchtime SMPTE Standards Workshop hosted by Jim Wilkinson. There are few people in the industry who know more about SMPTE standards for TV than Jim Wilkinson and he will lead the delegates through the myriad of HD standards so they have a thorough overview. This session is vital for anyone involved in the development, specification, procurement or maintenance and operation of HD equipment.

Held at the prestigious Royal Institute of British Architects (RIBA) conference centre right in the heart of London on June 25-26, HD Masters 2007 has been created by CMPi and is a co-presented by *TVBEurope*, BKSTS and SMPTE.

[www.HDMasters2007.com](http://www.HDMasters2007.com)

camcorder and the AJ-HPX2100 handheld camcorder, the fact that the small cameras can play recordings from the larger camera is an added bonus. "Our crews often take a mix of cameras on important assignments, but with tape if something happens to the larger camera the smaller one won't be able to play the footage. With P2 they can, as the cards are the same," said Gibson.

The IP-based Streambox contribution system replaces a traditional two-dish ruggedised ISDN M4 satphone system that filled the equivalent of four suitcases, and basically works like a giant mobile phone network via satellite services provider Inmarsat's BGAN (broadband global area network).

"We looked at three or four IP coding providers, but what we really liked about Streambox's proprietary ACTL3 algorithm is that it can work with either dedicated hardware or on a laptop, which gives us more flexibility than a software-only system," said Gibson. "We were also very impressed by the picture quality —

with many types of footage you can be streaming live at 256kbps, and at higher rates viewers could be hard pushed to know that the signal was using broadband at all." Once again, the kit is cheap enough to allow every edit crew in the field to have their own Streambox.

Inmarsat currently has two partially overlapping BGAN satellites, one stretching from the west of England to Japan and the other from France to the west coast of the US. A third targeting the Pacific is planned for launch in September. In each case links can be established without prior booking, as subscribers are simply billed according to usage — typically between \$15 and \$20 (US) per minute for live streaming, or \$5 to \$10 per megabyte for data.

Hoteliers hosting news crews are no strangers to requests for rooms facing a particular direction or possessing dish-friendly balconies. "The small Explorer 700 satellite terminal from manufacturer Thrane & Thrane we now use comes with a compass for much



**Realtime results:** More than nine million televiewers followed the results of the French Presidential elections in May, watching TF1 and LC1's use of Orad's 3D graphic enhancement. Fabien Jacob, artistic director of TF1 News said, "Orad's 3D realtime graphics platform provided us with infinite flexibility in the control and broadcasting of all the graphic elements which are an integral part of such an intense graphic display. The dynamic components, including posting the last seconds results, were combined with complex pre-rendered elements, in order to compose a true graphic scenography which is crucial for such an important event." Nine Orad HDVG rendering stations, piloted by Alimage, were deployed by TF1 and LC1 for the on-air graphics to be broadcast live-to-air, with some being used to drive the graphics behind the presenters. [www.orad.tv](http://www.orad.tv)

easier set up, while also allowing signals to be shared thanks to built-in Bluetooth and Wi-Fi connectivity," said Gibson.

Despite using broadband bit rates, Sky sidesteps the maelstrom of the internet by intercepting satellite signals via Sky's leased line from the Netherlands. Not that the internet is a no-go area. "We have used plug-in broadband connections within some hotels and universities, which although passing through the internet can work fine with a minimum of 256kbps, as Streambox is able to add more forward error correction," said Gibson. "In practise some plug-in links offer up to 800kbps in Korea or even 2Mbps in parts of Australia for example."

For especially remote and hostile environments Sky uses store-and-forward technology instead of realtime streaming, where content typically takes 10 times the running length to deliver, using the log-in service provided by Livewire Digital of Surrey, England rather than Streambox.

## Sky news revival

← Continued from page 1

MPEG-2 codecs for a given picture quality. By compressing information only within each frame and not between them, Panasonic claims the format is intrinsically edit-friendly, avoiding what the company describes as the 'compromises' of Long-GOP (group of pictures) motion compression.

"The latest cards store 32 minutes at standard definition, but as the system can seamlessly 'span' up to five cards, the total running capacity is more than two and a half hours," said Gibson. "Furthermore P2 content can be transferred at 7x realtime, which is much faster than any tape system — and Panasonic's P2 Store can dub up to 15 cards consecutively."

### A Streambox each

Given that Sky is equipping crews with both the Panasonic AJ-HPX2100 shoulder mounted

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## CONTENTS

### 1-10 News & Analysis

#### 6 Metadata comeback

The focus for the NAB AMWA demo was on creating a single MXF master file from which multiple versions could be created.

Nick Radlo was there

#### 8 Mission critical

Files are central to any concept of IT-based television production, and metadata is the only way to manage them. Analysis by David Fox

### 13-22 TVBE Survey

13 Analysis of our Broadcast Industry Trends Survey 2007, conducted in partnership with Sony Professional Solutions Europe. By Fergal Ringrose

### 24-41 NAB Wrap-Up

#### 24 Down to business

This year's NAB was more about business and less about technology. It was not a vintage year for radical introductions, writes Dick Hobbs

#### 30 News costs less

If you were to base your view of this niche on NAB, you might think that the SNG market is starting to run out of technological steam. By Jonathan Higgins

#### 32 Sharp images

In acquisition, the pointers were the viability of 4k and the adoption of 3Gbps by vendors to facilitate 1080p production — according to George Jarrett

#### 38 Changed landscape

Grass Valley's Infinity format suddenly found itself up against two new competitors, from Sony and Ikegami/Toshiba. By Ken Kerschbaumer

#### 40 Future cinema

What's at the leading edge of 3-D cinematography? George Jarrett talked to world-leading expert Vince Pace

#### 42 The Workflow

#### 42 To PC or not?

In 2007 there has been more discussion about IT-based broadcasting than in the previous decade. Guest Opinion by Mark Errington, On-Air Systems