As TV goes mobile SIs respond

Multiscreen Systems Integrators add real value to a broadcaster's delivery strategy, argues **Tomas Petru**, CEO, Visual Unity

Opinion

Tomas Petru: Few traditional systems integrators have the expertise

As we go through this IBC, the market is facing the most significant paradigm shift in the last decade, with traditional linear broadcasting unable to meet the demands of the emerging multi-screen audience. Let's be frank: if you're managing your broadcast operations in the same way as you were in 2007 (when the iPhone first hit the market) and have not yet implemented a TV-mobile strategy, you're missing out on more than 50% of today's potential audience and a demographic of future big spenders.

An effective TV-mobile strategy calls for more than simply delivering online services to enhance your brand offering. The global proliferation of mobile devices (as high as 70% in emerging markets alone) is changing the very nature of content consumption and is forcing broadcasters to develop innovative strategies to attract users, maintain existing subscribers and secure new revenue streams to deliver their digital dividend – from social media engagement to the development of apps for a diverse range of mobile devices.

From a delivery perspective, undoubtedly there are challenges to be overcome in reaching this mobile audience, including lack of bandwidth access. Moving TV into the Cloud will enhance the experience for some, but as Cloud coverage does not extend beyond the US and Western Europe, the majority of the world's mobile audience will not benefit. Broadcasters will still need to rely on bespoke Content Delivery Networks (CDN) to provide effective local streaming.

From an operational perspective, the publication of online and mobile content is too often a labour-intensive process, disjointed from the broadcast workflow. In many organisations worldwide, the selection and preparation of online content, assignment of metadata and reformatting for various mobile devices, is still performed manually. This fragmentation of the publishing/new media group from the broadcast operation means that broadcasters often lack the agility to respond to the ever-increasing demand for speed-to-market.

Considering these challenges, it is clear that the successful delivery of TV-mobile strategies rests on true integration of web and mobile into the broadcast workflow, whether in the Cloud or CDN. However, in this environment, where the key players are software developers not broadcast engineers, few traditional Systems Integrators have the expertise or indeed credibility to win over the stakeholders.

This is where Multiscreen Systems Integrators (MSIs), such as Visual Unity, add real value. Blending CDN and streaming expertise with an inherent understanding of traditional broadcast operations, this new breed of solution provider supports broadcasters to optimise their existing workflows and effectively deliver new mobile content from the point of content creation.

Visitors to IBC are looking to exhibitors to deliver clear direction on how to reach new audiences on new screens in new ways. The broad base of technology providers, offering out-of-the-box applications or bespoke solutions, cannot be relied upon alone to deliver a truly integrated mobile solution. It is the role of MSIs, such as Visual Unity, to bring about video-broadcast-mobile convergence and enable broadcasters to secure their place in the connected device era. **3.C35**

High Dynamic Range

WMG, University of Warwick

By Adrian Pennington

A world's first High Dynamic Range (HDR) acquisition to display pipeline is being shown in Hall 8's Future Zone. HDR imaging has the capacity to record the highest dynamic range similar to the human eye with potential applications in sports, documentaries and feature films.

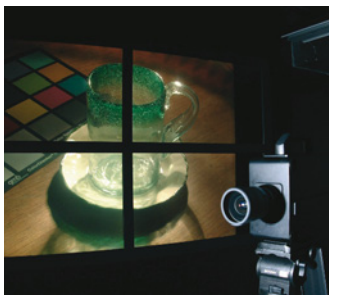
The demonstration is being given by the WMG – which is part of the University of Warwick – and its spin-off company, goHDR. They are showing live and recorded HDR video content displayed via a special Media Player on an HDR display, as well as on standard low dynamic range displays, including a TV and laptop.

Whereas the HDR display is showing a true HDR image, the laptop and LCD TV are displaying tone-mapped versions and the ability to show up to 20 separate exposures per frame. The HDR imaging system includes a camera manufactured by SpheronVR which captures 20 stops at 30fps.

HDR cameras and displays are appearing on the market from various sources, but the missing ingredient has been a compression technology that binds a full workflow together. That is what WMG's researchers claim to have solved.

"We are capturing 42GB a minute – or a CD second of data – so without compression HDR is unpractical," explained professor Alan Chalmers, head of the Visualisation Research group, at WMG International Digital Laboratory. At IBC, the HDR data isn't compressed out of the camera but dumped to a 24TB array, although Chalmers says direct from camera compression is possible.

"We want to preserve data along the pipeline and to work with existing infrastructure," added Chalmers. "We have worked very hard to get the codec perceptually lossless, at a 100-1 ratio, but part of our exposure to IBC is to look further into this.



World's first HDR workflow on display in the Future Zone, adjacent to Hall 8

"There are applications in golf where cameras find it notoriously hard to track golf balls at speed against sky and trees. You just get far more detail and a very rich experience in shadow and shade. Wildlife filming is another genre that would benefit because of the bright contrasts when filming outdoors."

Other manufacturers addressing HDR include Dolby (an HDR display), Italy's Sim2 (HDR display) and Texan firm AMP, which has a new three sensor HDR camera, AMPII.

"One problem is that few people are aware of HDR so IBC is a great chance for us to educate the market," said Chalmers. **8.G41**

A matter of timing: A SprintCam Vvs HD covers a Real Madrid-Barcelona match in last season's La Liga championship

Putting on a Sprint to show ultra-slow-motion

I-Movix

By David Fox

I-Movix is showing the latest version of its SprintCam Vvs HD, the shoulder-mounted, portable, ultra-slow-motion system for live HD production. It operates at up to 2,700 frames per second in 1080i50 or up to 5,800fps in 720p60 (200 times slower than live action), and provides instant replay at native HD resolution and image quality.

New features include: a totally new operational control panel with a more user-friendly design and extra functionality; a 3D slow-motion capture option; and a dual output that allows users to shoot and record at the same time. The specification also features segmented memory, ramping of speed within a replay, and integration of both live- and replay-view on the viewfinder.

The SprintCam Vvs HD system is based on the latest Phantom technology from Vision Research, with: an OCP that provides broadcast-quality colour matrix and control of frame rate choice; a slow-motion remote that allows the user to select a video sequence and instantly replay it with an HD-SDI output for live broadcast or storage on any HD-SDI recorder for a later use; and the camera control unit, which provides control of the slow-motion instant replay, camera control and data interface between the camera, EVS server or SDI recorder.

I-Movix is also intending to show the prototype of a totally new system that it says "will be a first in the ultra-slow-motion market". **11.E60**