



www.samfoxextremeadventures.tv is a dedicated and interactive website destination for the comedy adventure series, *Sam Fox: Extreme Adventures*.

### Sam Fox goes interactive

**SYDNEY** – SLR Productions has launched www.samfoxextremeadventures.tv, a dedicated and interactive website destination for the comedy adventure series, *Sam Fox: Extreme Adventures*.

Coinciding with the series premiere on Eleven in Australia, www.samfoxextremeadventures.tv features an innovative Google Earth functionality and utilises customised image and video content from the TV series.

Users can search for hidden content items including animals, survival tips, family members, geographical locations and hidden treasure all located in sites featured in the TV series to uncover *Sam Fox: Extreme Adventures* images, video content or Wikipedia page links.

Suzanne Ryan, executive producer and CEO of SRL Productions, said: "By its very nature, the television series *Sam Fox: Extreme Adventures* lends itself to a Google Earth integrated and interactive website. We have worked very closely with The Project Factory to create this educationally fun Sam Fox environment and are thrilled to be seeing it go live today".

# LTE not in line to replace broadcasting

BY SHAWN LIEW

**GENEVA** – Long-term evolution (LTE) networks have the potential to be complimentary to traditional broadcast distribution mediums, but cannot be considered a realistic alternative to wholly deliver broadcast content and services, says the European Broadcasting Union (EBU) in its latest technical report.

The *EBU Technical Report 027* presented the outcome of the "first-ever" jointly conducted study by broadcasters and the mobile industry, focusing on the capability of LTE eMBMS (Evolved Multimedia Broadcast Multicast Service) to enable the use cases that are relevant to broadcasters, for example, the viewing of linear TV content on a tablet either at home or on-the-move.

The EBU found that while the examined use cases in the study



Broadcast distribution remains the most effective method to transmit content to mass audiences.

— from a technical point of view — could in principal be enabled by LTE eMBMS, further development is required.

Darko Ratkaj, senior project manager, Technology & Inno-

vation, EBU, explained to APB: "eMBMS is essentially a bandwidth optimisation technique within LTE and a fully-fledged media delivery system.

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## WBU: Preserve spectrum for broadcasting

**TORONTO** – The allocation of digital TV (DTV) and satellite distribution spectrums cannot be compromised, the World Broadcasting Union (WBU) has cautioned.

The WBU is adamant that in specific regards to DTV, current spectrum allocations at UHF frequencies (470-694/698MHz) should be maintained, while recommending that contiguous spectrum be allotted in the bands assigned to the broadcast service.

The WBU also does not support any change to the

current spectrum allocations at C-band or extended C-band satellite distribution frequencies, stating: "The use of downlink spectrum allocated at C-band (3.7-4.2GHz) or extended C-band in the fixed-satellite service is essential to operations of broadcasters around the world."

The WBU's call is a timely reminder to broadcasters that come WRC-15 next year, the International Telecommunications Union (ITU) will hear the case

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### WORLD IN BRIEF

#### Coalition declares anti-piracy success

**DUBAI** – The Broadcast Satellite Anti-Piracy Coalition, set up in March 2014 by major Middle East broadcasters, satellite operators and service providers, has claimed success in its battle against the region's pirate TV channels. The continuous monitoring and reporting of intellectual infringements have seen a number of channels gone off air, said the coalition.

#### Pandora TV launches UHD service

**SEOUL** – Pandora TV, a South Korean video-sharing website that hosts user-generated content, launched its own UHD online broadcasting service last month. The launch follows up on Pandora TV's addition of a 4K UHD playback feature to its KM Player last January, which marked the "first time" UHD broadcasting was introduced onto a video platform.

#### Vietnam set for DTV

**HANOI** – Vietnam is expected to complete its DTV switchover by next year, bringing with it higher quality TV programmes to some 22 million TV households, said Vietnam's Ministry of Information and Communications (MIC). Vietnam is using the DVB-T2 standard for the switchover, which will allow one spectrum band to serve 20 channels, said MIC's Authority of Radio Frequency Management.

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# Act now: Lobby govts to step up fight to protect TV spectrum

Over the course of the last 18 months, APB has been advocating that broadcasters be more proactive in lobbying their governments to put up a strong case to preserve broadcast spectrum at WRC-15 in Geneva next year.

This is because we firmly believe that spectrum is the bloodline for terrestrial TV services not only for today but also for the future of broadcast television.

We have repeatedly urged broadcasters to lobby their respective governments to step up the fight to preserve broadcast spectrum, even as the clock continues to tick away.

As you are reading this, we are barely a year away from WRC-15, where worryingly, the pendulum appears to be swinging in favour of mobile service providers who are pressing hard for additional spectrum allocation in both the UHF and C-band frequency bands.

In recognition of the urgency to act, the World Broadcasting Union (WBU) has issued a statement calling for status quo to remain in current spectrum allocations. The use of radio-frequency spectrum by broadcasters, stated the WBU, remains "an important vehicle for the efficient and scalable delivery of high-quality media content and emergency alerting services to both fixed and mobile audiences".

The WBU's clarion call has been swiftly endorsed by both the Asia-Pacific Broadcasting Union (ABU) and the European Broadcasting Union (EBU), which recently released a report highlighting that while LTE networks have emerged as a complementary option, it cannot realistically be considered as a viable alternative to replace traditional broadcast mediums in the

foreseeable future.

As APB reported last month, IP technology is also emerging as a medium of choice for both content production and delivery, as broadcasters grapple with the conundrum of retaining eyeballs in a world inundated with multiple connected viewing devices.

However, it can be reasonably argued that, like LTE, IP technology should be consigned to a supporting role, as free-to-air, terrestrial networks remain the most effective method to deliver TV services to mass audiences.

It will be a bleak day in the history of TV broadcasting should, come WRC-15, broadcasters are handicapped by their ability to continue to provide the public service broadcast programmes that have been much of their mandate in years past.

It must be reiterated that spectrum auctions are akin to handing spectrum to mobile service providers on a platter, because public service providers simply do not have the financial clout to compete on an even footing.

Broadcasters' best, and possibly only weapon, in the spectrum war, lies in convincing their governments and regulators of the critical importance of preserving enough spectrum for both current and future broadcast services.

It is a battle that broadcasters can ill-afford to lose.

*Shawn Liew*

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# Awards for TV programmes on disaster recovery

**SENDAI** – The United Nations, the Asia-Pacific Broadcasting Union (ABU) and the European Broadcasting Union (EBU) are launching a new award for TV programmes focusing on people coping with disasters.

The inaugural Disaster Risk Reduction Film Awards will celebrate a 10-year alliance between the UN Office for Disaster Risk Reduction (UNISDR) and members of the ABU and the EBU to advance the spread of knowledge on dealing with disasters.

TV broadcasters are invited to submit documentaries produced between 2005 and 2015, capturing positive human stories of courage, strength and resilience; investigative stories on past disasters or disasters waiting to happen; and, innovative stories about risk reduction solutions.

The time frame corresponds with the implementation of Hyogo Framework for Action, a 10-year plan of action to make the planet more resilient to disasters.

The plan will be revisited at the Third UN World Conference on



**The United Nations, the Asia-Pacific Broadcasting Union (ABU) and the European Broadcasting Union (EBU) are launching a new award for TV programmes focusing on people coping with disasters.**

Disaster Risk Reduction in Sendai, Japan, in March next year.

Jury members from the ABU, EBU and UNISDR will select the best films in four categories: *Best Disaster Risk Reduction Human Story*, *Best DRR Investigative Story*, *Best DRR Innovative Story* and *Best DRR Documentary*.

Broadcasters have until December 1 this year to submit their

entries, and winners will be showcased at an Awards Gala Ceremony at the Sendai world conference next year.

Dr Javad Mottaghi, ABU's secretary-general, said: "The media's responsibility is not only to report accurately disasters when they occur, but also to play a proactive role in preparing people for them and ultimately saving lives."

## ABU, EBU support the work done by WTU

of mobile service providers, who are pushing hard to procure additional spectrum at the expense of broadcasters.

Delivery of content over-the-air using frequencies remains the most efficient ways of delivering content to large number of recipients, and access to information must remain a basic right of all citizens of the world, said Dr Amal Punchihewa, director of technology at the Asia-Pacific Broadcasting Union (ABU).

Dr Amal said: "At a time when we are working hard to make sure there is no digital divide, digital access should not create an information divide by having barriers to access information."

Endorsing the work done by the WBU and its member broadcasting unions to protect spectrum for broadcasting services, the ABU has also declared its full support for broadcasters in opposing changes to the allocation of DTV and satellite distribution spectrums.

Dr Amal added: "Digital terrestrial television (DTT) remains the most efficient means of delivering a TV programme to a mass audience. Local programming relies heavily on the secure, free-to-air (FTA) signal, and it is the only way to reach certain geographical areas and populations.

"Public broadcasters must ensure that their audiences have access to FTA TV ... The delivery of DTT relies on the availability of certain spectrum."

Also throwing its support behind the WBU is the European Broadcasting Union (EBU), which maintains that DTT remains the most popular TV platform in Europe, and is currently used by about 40% of the population on primary TV sets.

Darko Ratkaj, senior project manager, Technology & Innovation, EBU, related: "In some countries [in Europe], DTT penetration is as high as 90%, and DTT networks have a legal requirement to provide a near-universal coverage (more than 98% of the population), at least for public service programmes.

"DTT is the only FTA TV platform and carries national, regional and local channels."

In the Asia-Pacific region, the ABU estimates that close to four billion people rely on DTT, with the number expected to swell as more countries in the region edge closer to their digital switchover deadlines

Dr Amal said: "As radio spectrum becomes more crowded, it is vital to protect its integrity for

broadcasters who serve billions of viewers and listeners around the world."

When contacted, Singapore's Infocomm Development Authority of Singapore (IDA) said that it will closely monitor international discussions and developments on the use of UHF spectrum, but any decision is likely to be in line with that of the ITU.

An IDA spokesperson told APB: "In Singapore, IDA aligns its radio spectrum plan closely with recommendations from the ITU.

"IDA has assigned part of the band for broadcast services in Singapore, consistent with ITU's recommendations for the Asia-Pacific region."

In Malaysia, the frequency bands of 470MHz - 694MHz and 3400MHz - 4200MHz have been identified for DTT service and fixed satellite service respectively.

Replying to APB, a spokesperson from the Malaysian Communications and Multimedia Commission (MCMC) said that Malaysia will continue to "follow closely" studies conducted by ITU study groups in relation to sharing of spectrum bands with IMT systems leading up to WRC-15.

## LTE complements but not an alternative to broadcasting

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"Additional features would need to be included in the LTE specification in order to facilitate a wide area coverage, guaranteed quality, and improved spectrum efficiency required to make eMBMS a viable technology for distribution of linear TV services to large audiences."

These features, Ratkaj added, include a possibility to use dedicated frequency channels, as opposed to the current limit of 60% capacity within an LTE channel; high-power mode, which would enable less dense networks to be built; and the possibility for different operators to share the same eMBMS resource, so as to avoid multiple transmissions of the same content or service.

However, with the surge in ownership of connected smart devices, broadcasters cannot ignore the accompanying demand to consume linear TV content on these devices.

This is where LTE networks step in as a complement to traditional broadcast distribution and fixed broadband+Wi-Fi.

LTE networks that are being rolled out could conceivably provide sufficient bandwidth capacity for watching live TV on consumer devices. Still, Ratkaj cautioned: "What we learnt from our study is that, apart from the necessary technical developments, there is currently no market model for delivery of linear TV to large audiences over LTE."

"We do not yet know whether mobile network operators would be interested to enable such services and under what conditions. Then, there is the big open question of costs to end-users."

While LTE may technically be capable of transmitting broadcast content, cost will be a key factor, agreed Erina Tobing, director of engineering at Televisi Republik Indonesia (TVRI).

Tobing told APB: "The non-technical issues [associated with LTE] should be assessed carefully, especially the cost that viewers have to pay; the infrastructure and the new types or generation of mobile-phones gadgets within an affordable price range need to be mass-produced as well."

In the near future, particularly in Asia-Pacific, Tobing cannot foresee LTE as a viable option to replace free terrestrial transmission. She said: "Continuous viewing via

mobile phones or other mobile gadgets does not seem to be a favourite option for viewers, who tend to use them to view certain content that they do not want to miss while they are away from fixed TV receivers.

"The application of LTE is [still] mainly for communication and high-speed data, and not for continuous TV broadcast service.



**EBU's Darko Ratkaj: "Apart from the necessary technical developments, there is currently no market model for delivery of linear TV to large audiences over LTE."**

"Moreover, the rate of LTE penetration in Asia-Pacific is generally still very low, except for South Korea and, perhaps, Japan."

One Asia-Pacific broadcaster who is rather optimistic about the feasibility of LTE as a broadcast medium, albeit in a supporting role, is Singapore's MediaCorp.

The key factor, according to Joe Igoe, CTO of MediaCorp, is whether

mobile operators with limited spectrum can make more profit from serving an increased amount of customers with a faster data service, or providing all customers with a broadcast service.

Igoe also recommended that the easiest way to measure market demand for broadcast services to handhelds, is to offer devices capable of receiving existing broadcasts and let the market respond.

Relating MediaCorp's experience, Igoe said: "We are building a DVB-T2 network in Singapore that will offer residential in-building coverage, as well as the potential for mobile coverage across the country.

"We see this as the ideal outcome as enabling mobiles to have the existing subscription carrier services, as well as free-to-air broadcast reception."

More studies need to be conducted on aspects such as operational conditions, regulatory frameworks, business models and costs before the jury can be out on LTE, according to Dr Amal Punchihewa, director of technology at the Asia-Pacific Broadcasting Union (ABU).



**TVRI's Erina Tobing: "The application of LTE is [still] mainly for communication and high-speed data, and not for continuous TV broadcast service."**

Dr Amal said: "Before any planning or deployments, it is required to investigate in depth the operational viability of a nation-wide delivery of broadcast content over LTE.

"Indeed, LTE could be another complement to broadcast distribution platforms ... However, it is not realistic to expect that LTE will become a viable alternative to broadcast distribution, including terrestrial TV networks, in the foreseeable future."