

# Insights Broadcasting Digital Migration

TOWARDS DUAL ILLUMINATION

# 10, 9, 8, 7... the final countdown

Only a few challenges remain before finalisation of the move to digital television, such as network sharing and manufacture of set-top boxes

IN THE UK, it's taken 11 years so far to get 70% of the population using digital — and the last analogue transmitters will not be switched off until 2012 at the earliest. But in the meantime, 70% of Britons are enjoying about 40 digital channels and hundreds of channels on pay-TV, says Amanda Armstrong, a director and telecommunications and broadcasting law specialist at Werksmans. She believes it is unlikely SA will accomplish the transition within three years by 2011. "Extending the deadline is not uncommon, even in developed nations, and I suspect this will be the case in SA. However, the absolute deadline of June 2015 for Africa as a whole is non-negotiable. This deadline should be well within our capability." The reason for her optimism is that since the Department of Communications finally released

its long-awaited policy document last year, the industry, from Icaisa through to broadcasters and set-top box manufacturers have wasted no time in getting things back on track, she says. "As a result, we are close to being able to launch commercial Digital Terrestrial Television (DTT) services and mobile broadcasting services." Punted to be the most significant revolution TV has yet seen, DTT will give users access to a multi-channel, multi-platform viewing experience. Aimed squarely at average TV viewers, DTT will finally bring true convergence into living rooms. However, it is a complex process, and one of the obstacles that only two national digital networks are available for our three terrestrial television broadcasters (SABC, e-tv and M-Net). "This means two broadcasters would have to share a network,

which poses considerable logistical and technical problems," says Armstrong. However, M-Net has proposed a solution. The three-year transition phase consumes a larger amount of frequency, as both analogue and digital broadcasting signals have to be transmitted in parallel. However, at the end of the "dual illumination" period a considerable amount of frequency will be released for new broadcasters and voice and data services. M-Net proposes achieving its migration far more rapidly (within less than a year) using some of its existing frequencies to create a third network, provided it is sufficiently incentivised to make this "hard switch-over". This accelerated migration will be expensive — hence the need for incentives from Icaisa. This issue, together with other outstanding regulatory issues, is currently



Amanda Armstrong, telecom and broadcast law specialist.

under consideration by Icaisa, which published draft regulations late last year, and held hearings early this year. These regulations will address the dual illumination period, following which new regulations will be required. "The industry has requested a less prescriptive approach by Icaisa as to how many DTT channels broadcasters can include per national digital network — Icaisa appears amenable to this approach," says Armstrong. "All broadcasters, not just M-Net, are calling for incentives to enable them to afford the huge costs associated with having to broadcast on an analogue and

digital basis for at least three years. Such incentives include a reduction in annual licence fees and the easing of local content requirements," she says. Despite these issues, Armstrong says "we are very near to finalisation". However, one additional challenge is the manufacture of set-top boxes (STBs), which will allow existing televisions to accept the digital signal. The process of setting minimum standards for those boxes is being managed by the SA Bureau of Standards. "The real challenges therefore are to manufacture the STBs as affordably as possible and in huge volumes, and for broadcasters to actually launch their commercial services," she says. Television sets will increasingly become integrated with fixed and mobile broadband networks, allowing viewers to switch easily between watching television, surfing the internet and shopping online. A primary benefit of DTT that is sure to thrill analogue viewers will be the clearer, sharper pictures, without the poor reception that some residents of built-up areas or hilly terrain sometimes experience. DTT also offers a wide-screen format and multiple language offerings per channel. However, says Armstrong, a rude surprise for many will be that unless they buy an STB, after the end of dual illumination, they will not be able to receive any TV services. A second aspect of the digital migration is mobile broadcasting. Armstrong says there is currently insufficient frequency for national broadcasters. What is contemplated initially are two metropolitan networks (serving Cape Town, Durban, Johannesburg and Pretoria). Icaisa is expected to re-gazette its invitation to apply for this spectrum in May, and to process those applications as soon as possible, so that mobile broadcasting can launch commercially in SA in the second half of this year.

## When the consumer is king

THE way music, movies, games and TV are being consumed is becoming vastly different to the way in which it was consumed just a decade ago. Nowadaya consumers have more power and are becoming the ones "pulling" the content they want, as opposed to being passive recipients of content broadcast to them as and when the disseminator decides to do so, according to BMI-TechKnowledge (BMI-T). The ICT market analyst contends the new pull model comes with new ways of offering the content, including interactivity and new social aspects such as personalising the content. BMI-T says that digital media represents a huge opportunity in SA, especially on the mobile front, and companies would be well-advised to tag onto this rise in digital consumerism.

"The advent of digital music — its effect on the way music is consumed — is a good example of the influence consumers can have on the market. With the decrease in physical CD sales worldwide, and the fact that digital music sales have not made up for the loss, music industry players have been forced to change the way they do business. Examples of this include Prince offering his album for free with a UK Sunday paper last year and Radiohead offering their album on their website for a fan-determined price, where fans could decide what they wanted to pay for the album, including not paying anything at all." According to a BMI-T report, the Emerging Digital Media Market Analysis report, piracy is obviously still a big inhibitor to digital music sales and the music industry needs to implement more

innovative, inexpensive, easy to use business models for buying digital music to reduce piracy. BMI-T forecasts the growth of pay-TV, internet and mobile media and looks at the revenue models being tried in different categories. BMI-T expects growth in mobile content as well as mobile advertising to be very strong. Mobile advertising is forecast to reach between R1.3bn and R2.15bn by 2012, with the most likely scenario expected to be R1.7bn by 2012. "Growth depends on the amount of companies starting to use mobile advertising, and how quickly they jump on the bandwagon, as well as the success of such advertising and also on the degree of aggression with which the mobile operators and other major corporations push this market", says Astrid Hamilton, senior BMI-T analyst.

## The Dzonga's oversight role

CONTINUED FROM PAGE 2

throughout the process digital migration. The Digital Dzonga is the term used to describe the project office appointed to assist the advisory council in its duties. The advisory council is a non-executive body and consists of up to 15 members of which one must be the chairperson. It comprises the chairperson, 10 members representing various stakeholders, the chief executive officer of the Digital Dzonga and two mandatory members representing both the government and the regulator, Icaisa. The members should possess suitable qualifications, expertise and experience in one of the following fields: broadcasting, electronic engineering, economics, consumer issues, techno-

logy, frequency band planning or any other relevant expertise. The advisory council establishes working groups to assist council members in the effective exercise and performance of their duties. Working groups may be established to assist advisory council members on issues of technology and standards; broadcast infrastructure; help and support; communications; and monitoring and research. The council conducts research and provides regular reports on the progress of SA's migration to digital. The advisory council is also responsible for addressing conformance issues including branding and marketing a digital television logo for digital television equipment, to help the public identify compliant equipment; liaising with other departments

and agencies to ensure a smooth digital migration process; and consulting with representatives of consumer groups, to ensure that the views of these groups are taken into account. As a non-executive body, the Digital Dzonga advisory council is appointed by the minister of communications from nominations from the government, the regulator, industry, consumer bodies and the general public following a call for nominations from members of the public. However, two members representing both the government and the regulator are mandatory and not appointed through a public nomination process. Unless extended or terminated by the minister, the Digital Dzonga will have a limited lifespan until 2016.

# No one-size-fits-all method to switch

AT THE Commonwealth Telecommunications Organisation's (CTO) Digital Switchover Forum in 2007, the Department of Communications revealed how the process was to unfold in SA. Since then, the much-awaited policy has been approved by the Cabinet and subsequently released for immediate implementation, according to Mashilo Boloka, director at the broadcasting policy unit at the communications department, speaking at the Digital Broadcasting Switchover Forum 2009 (DBSF09). He told delegates that broadly, SA's approach is characterised by:

- A relatively shorter dual illumination (November last year to November 1 2011) with stricter time-table. The advantages of this would be to reduce dual illumination costs, reduce risk of technology dumping, provide sufficient time for uptake and usage of set top boxes (STBs) and digital TVs before the 2015 cut-off date;
- Consistency with the developmental state that SA is — stronger state intervention in the economy; the rural nature of the country (approximately 70%); 94% of the population relies on free to air television; 18% of the population relies on the government grants and, therefore, are not able to afford the requisite STBs for accessing digital TV;
- The need to contribute to economic growth through local manufacturing of STBs, thus reviving the local industry and creating jobs.



Mashilo Boloka

of the TV households will not be able to afford STBs. To this end, Boloka says the South African government has:

- Made a firm commitment to provide subsidies to 5-million poor TV-owning households envisaged to be rolled-out by the Department of Social Development;
- Controlled STB entry into the market to ensure that the STBs not complying with approved specifications cannot work, while stolen ones are disabled;
- Balancing competing interests (public, commercial and consumers);
- Hybrid models to reach those areas with difficult topography.

Boloka acknowledges that SA's achievement to date is a culmination of long and hard work by the government in collaboration with the broadcast industry. "It is quite an ambitious migration period even by world standards. We are however confident that with South Africans working together this short migration can be achieved."

He pointed out a few lessons that we have learnt as a country. Firstly there is no one-size-fits-all method in the implementation of BDM as every country is unique. It is this uniqueness that should shape the process. Thus, factors such as the profile of the population, the objectives (population density and psychographic characteristics, topography, economic capacity) are key determinants. Secondly commitment from, co-operation with and co-ordination among all the stakeholders is vital. He says that new challenges such as economic meltdown, global warming and climate change are emerging. "We need to seek ways of confronting them, lest they scupper our plans to change our people's lives." He says SA is also in an advantageous position because of the planned Fifa Confederations Cup and Soccer World Cup in 2009 and 2010 respectively. These are key events around which DTT take-up is being planned. Therefore, as a country we will do whatever it takes to maximise consumer take-up in anticipation of this.

He warned that implementation of subsidy schemes for poor people are critical in driving take-up. As confirmed, preliminary research has demonstrated that 4.5-million Government has made a firm commitment to provide subsidies to 5-million poor TV-owning households envisaged to be rolled-out by the Department of Social Development



## Brits carefully nurture a £52bn industry

CAPABLE communications systems can help all British businesses become more efficient and productive, offering the potential to reduce travel, according to Andy Burnham, the British Secretary of State. Delivering his oral statement on the Digital Britain Interim Report, which is the Minister for Communications, Technology and Broadcasting's comprehensive review of Britain's digital, communication and creative sectors, Burnham reported that these sectors are both important in their own right — worth over £52bn a year, with two to three million people directly employed — "but fundamental to the way all businesses operate and how we all live our lives". "High-quality information and entertainment enhance our democracy, improve our quality of life and define our culture. "In short, building a digital Britain is about securing a competitive, low-carbon, productive and creative economy in the next five to 10 years." He pointed to Britain's traditional strength in these industries. The World Wide Web was invented by British ingenuity. "It was here that GSM was

created and established ... Our TV, music, film, games, advertising and software industries are world-leading. The OECD estimates that the UK cultural and creative sector (at just under 6% of GDP) is relatively more important than its equivalent in the US, Canada, France and Australia; Unesco considers the UK to be the world's biggest exporter of cultural goods, surpassing even the US. "The challenge now is this: how to build the networks and infrastructure that help businesses and consumers get the most from the digital age; and funding the quality content that enhances our culture and our economy." He said the government's thinking in these areas has been shaped by a series of important reviews, including: the Caio review on next generation broadband access; the work of the digital radio working group; the Byron review on children and new technology, which led to the establishment of the UK Council for Child Internet Safety; the convergence think tank; the digital inclusion action plan; and the creative Britain strategy. "Digital Britain brings these strands of work together into a clear and comprehensive

framework with five public policy ambitions at its heart. "First, to upgrade and modernise our digital networks — wired, wireless and broadcast. "Second, to secure a dynamic investment climate for British digital content, applications and services. "Third, to secure a wide range of high quality UK-made public service content for UK citizens and consumers, underpinning a healthy democracy. "Fourth, to ensure fair access for all and the ability for everyone to take part in the communications revolution. "Fifth, to develop the infrastructure, skills and take-up to enable widespread online delivery of public services," Burnham says. He reports that Britain 1 would establish a strategy group to assess measures to underpin existing market-led investment plans for Next Generation Access networks. An umbrella body will also be set up to provide technical advice and support to local and community networks. "To facilitate the move to next generation mobile services, we are specifying a Wireless Radio Spectrum Modernisation Programme. In addition, the

government is also committing to enabling Digital Audio Broadcasting to be a primary distribution network for radio in the UK; and will create a digital migration plan for radio. We will consider how the digital TV switchover help scheme can contribute towards this agenda." Burnham says Britain would only maintain its creative strength if it found new ways of paying for and sustaining creative content in the online age. "We will therefore explore the potential for a new Rights Agency to be established and, following consultation on how to tackle unlawful file-sharing, we propose to legislate to require Internet Service Providers to notify alleged infringers that their conduct is unlawful. "Our third objective — high quality UK-made public service content — will be achieved by sustaining public service broadcasting provision from the BBC and beyond. The report identifies news at local, regional, and national level, and children's programming as amongst the key priorities. "The BBC as an enabling force is central to this — strong and secure in its own future, working in partnership with others to

deliver these objectives. We will also explore how we can establish a sustainable public service organisation that offers scale and reach alongside the BBC, building on the strength of Channel 4. "We will consider the evolving relationship between independent producers and commissioners to ensure we have the appropriate rights holding arrangements for a multi-platform future." Burnham says Britain's fourth objective of fairness and access is crucial to delivering the government's policy of an inclusive society where new opportunities are available to all and nobody is left behind. "So we are developing plans to move towards a historic universal service commitment for broadband and digital services to include options up to 2Mb/s, building on the approach to postal services and telephones in centuries past." Lastly, to help people navigate this vast and changing world, the report makes recommendations to improve media literacy and, particularly, to give parents the information and tools necessary for protection of their children from harmful or inappropriate content.