JETHRO CONSULTING SOLUTION PTY LTD



INVITATION TO MAKE
INPUTS INTO THE
DISCUSSION
DOCUMENT ON
DIGITAL SOUND
BROADCASTING.

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Introduction



(A) About Us JETCON:

Jethro Consulting Solutions Pty Ltd aspires to be one of the leading consultancies for

- 1. Integrated ICT management and technology consultation and
- 2. Sectional & Industrial Property Management.

(B) Mission

To maximise our contribution to development by mobilising and providing consulting expertise especially to ICT SMMEs and by establishing partnerships to develop infrastructure to improve the quality of life of the people of South Africa.

(C) Vision

To further the progressive realisation of an empowered and integrated SADC region, free of poverty, inequity and dependency. To be a leading change agent for a sustainable socio-economic development in SADC region, and a strategic partner in South Africa.

(D) Goals

To improve the quality of life of the people of the region and accelerate the sustainable economy reduction of poverty and inequality. To advance broad-based economic growth and regional economic integration.

(E) Our Focus

JetCon is focused on Property management and specialised ICT market consultancy. Our specialisation in IT, telecoms and Broadcasting Policy and Regulations and analysis sets us apart in the South African marketplace

Inclusive Digital ICT Development



The other South Africa



- Low access to services (no tar roads, only 2.1% households connected to the grid)
- Low income (less than R600/month per person)
- Low level of education 13% of people with completed matric.

Constrained communications

- •- 86.66% of use mobile phones
- •- 22% of income in communications
- •- People sacrifice on basic food
- 77 min calling time/month (40% of time without airtim
- •- 22% of Internet users (25-30MB/month)

Source: Zenzele Network Rural project at Eastern Cape



Inclusive Digital ICT Development conti... JETcon



"Do it by ourselves"

- Zenzeleni Networks Ltd is a locally-owned, not-for profit ICT cooperative,
- Registered with the Department of Trade & Industry (DTI)
- Fully Licensed by ICASA

Purpose

- Reduce the Cost to Communicate
- Promotes Local content
- **Provides Digital Skills**
- ... Community-owned networks?

which is providing

- free internal calls and access to the local primary school, high school, users and business in the community and
- discounted rates to call mobile phones and landlines from a set of public phones spread in the community
- It connected via a network of WiFi access points.
- Provides GSM Cell phones charging stations deployed in the community









(Question 1: Is there a need for the introduction of DSB technologies in South Africa? Motivate your answer?

- JetCon's view is Yes, in order for SA to remain commercially attractive, radio as a medium will have to deliver improved quality service, greater choice, interactivity and multi-media. Digital radio technologies must rise to the challenge and deliver the multimedia radio of the future.
- And also because of digitisation programs to use spectrum efficiently and with new technologies opportunities. There are two main generations of DSB: digital audio broadcasting (DAB) and digital radio mondiale (DRM). As documents indicated that trials have been carried on both systems.

Question 2: Do you think the list of technical standards to which the DSB equipment must conform are exhaustive? Motivate your response and suggest other equipment technical standards?

JetCon's view is Yes they are exhaustive and JetCon is of the view that there are sufficient for our environment. DAB+:

- Transmit other types of information with the audio such as album covers, the name of the artist or the latest news headlines.
- 2. When the signal is weak, the listener still enjoys good sound quality.
- 3. DAB+'s compression technology offers up to 200 DAB+ radio broadcasters in a region.

DRM+

- 1. The flexibility to offer a wide range of subsidiary data services, multiplexed programming or single frequency networks.
- 2. Capable of operating in a compatibility mode in which the huge existing base of FM receivers in the home and cars can continue to be used until the audience and broadcasters can complete the changeover on the basis of mutual convenience and needs.
- 3. DRM+ has the flexibility to satisfy any coverage need in Band II ranging from national and regional networks to community stations.



- Question 3: In the absence of a policy directive for providing standard for DSB, should the Authority provide licences for other DSB technologies? Please motivate your answer.
- JetCon is of the view that ICASA must not provide licences for the DSB technologies in the absence of a
 policy directive. SA needs certainty on the policy and stardards which will attract FDI Foreign direct
 investment on Manufacturing of mostly Receivers.
- Question 4: South Africa through its international agreements at ITU and SADC level agreed on DAB+ and DRM systems. Please indicate which other digital sound broadcasting technology(ies) if any should be considered for South Africa? Please motivate.
- JetCon is of the view that South Africa should continue to support commitments through its international agreements (at ITU and SADC level) agreed on DAB+ and DRM systems.
- Question 5: To use the spectrum efficiently, the digital sound broadcasting network can be planned on a Single Frequency Network. Do you think that it would be applicable for purposes of digital sound broadcasting? Please motivate.
- JetCon's view is that, YES it would be applicable for purposes of digital sound broadcasting. A single-frequency network or SFN is a broadcast network where several transmitters simultaneously send the same signal over the same frequency channel.
- Analog AM and FM radio broadcast networks as well as digital broadcast networks can operate in this
 manner. SFNs are not generally compatible with analog television transmission, since the SFN results
 in ghosting due to echoes of the same signal.
- A simplified form of SFN can be achieved by a low power co-channel repeater, booster or broadcast translator, which is utilized as gap filler transmitter.



Question 6:

- 6.1 Should the Authority consider one or more mux operator(s) for DSB? Please motivate.
- JetCon is of the view that the Authority should consider more mux operators in oder to be able to transform Audio Sound broadcasting sector in South Africa.
- 6.2 Would you propose a total switch off of the traditional analogue AM and FM sound broadcasting? Please motivate.
- JetCon is of the view that South Africa should maintain in parallel the traditional analogue AM and FM
 FOR TIME BEING, until the sector rolls out the DSB Technology across the country and prices are
 affordable.
- Question 7: Should the Authority adopt the strategy used in other international markets of licensing DSB services in the primary markets first and then a nationwide rollout? Please motivate.
- JetCon is of the view that immediate nationwide rollout strategy will be the best to fast track the transformation of the sector and also the technology has the flexibility to satisfy any coverage need in Band II ranging from national and regional networks to community stations
- Question 8: Can the current sound broadcasting market afford new DSB licensees in community, commercial and public service? In your answer, explain your reasons and/or choice for any of your submission.
- JetCon is of the view that YES there is a market in South Africa for DSB licensees due to the past skewed policies of Apartheid. South Africans need more local relevant content which will be sufficient for our environment



ANNEXURE A: Additional Questions

For Consumers

- **1.** What is your understanding and expectations of digital sound broadcasting? Migration from Analogue to Digital broadcasting and efficient use of Spectrum.
- 2. What impact do you think DSB will have on your experience of radio? High quality radio signal and sound and low barrier to entry.
- **3.** What concerns do you have regarding the implementation of DSB? The choice of which standard to be adopted for South Africa.
- 4. Do you believe that the cost associated with acquiring DSB devices is worth it considering that you already utilize analogue radio? Yes, I believe that the cost associated with acquiring DSB devices is worth it.
- **5.** What are your expectations from broadcasters and manufacturers? I expect development of local content by broadcaster and technology Innovation from Manufacturers.
- 6. Do you have any suggestions to provide to the Authority with respect to the implementation and regulation of DSB? I suggest immediate Policy directive and immediate National rollout.
- 7. Please provide the Authority with any further information you deem necessary and asked herein. Will the Authority allow private infrastructure developers to build independent networks of multiplexing centres and radio transmitter sites across South Africa that provides the infrastructure that delivers digital radio stations from broadcast studios to millions of listeners across the country?
- 8. Will you be willing to trade your traditional analogue radio receiver for a digital radio? Motivate your answer. Yes I will be willing to trade my traditional analogue radio receiver for a digital radio provided AM and FM is switched-off immediately or and the cost of digital radio is affordable.



ANNEXURE A: Additional Questions

For Broadcasters

- 1. What is your understanding, expectations and concerns as broadcasters with respect to DSB?
- 2. How will DSB impact your sound broadcasting services business?
- 3. What are the projected financial implications associated with DSB, considering that Digital Terrestrial Television (DTT) is to be implemented prior to DSB?
- 4. What issues of concern should the Authority be wary of when implementing and planning for the regulation of DSB, with respect to competition, spectrum concerns, financial considerations etc.;
- 5. Do you believe DSB will encourage growth in your business or will it create unnecessary financial pressure on your business?
- 6. Have you conducted research on DSB and the implementation and regulation of same that you can share with the Authority?
- 7. Please provide the Authority with any further information you deem necessary and asked herein.
- 8. How would the introduction of digital sound broadcasting benefit the service providers?
- JetCon has no comments for Broadcasters.



ANNEXURE A: Additional Questions

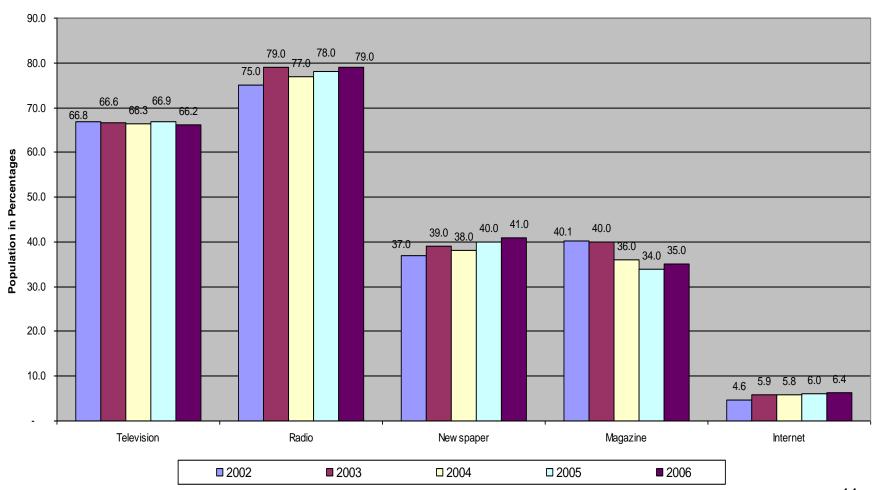
For Manufacturers

- 1. What is your understanding of DSB and the impact it will have on your business model and financial projections in South Africa once implemented?
- 2. What financial, competition, manufacturing etc. challenge do you anticipate having with respect to DSB?
- 3. Do you plan on building and manufacturing equipment for DSB in South Africa in partnership with state or regulatorily assigned Broad-Based Black-Economic Empowerment and Historically Disadvantaged Groups?
- 4. What is your business plan, if any with respect to preparing yourselves for manufacturing and selling DBS equipment for South African consumers?
- 5. What pricing negotiations are you open to discussing with relevant bodies, including the Authority, to make the said DSB equipment affordable for consumers?
- 6. Will the introduction of DSB create more jobs for South Africans in your sector? If not why, if yes, how will this impact the statistics on job levels in the South African economy?
- 7. What projected impact do you believe that DSB will have on your business in terms of growing same and enhancing operations in South Africa?
- 8. Would you be prepared to partner with the Authority or the state in ensuring the success and uptake of DSB in South Africa?
- 9. Have you conducted any studies or research with respect to the manufacturing, distribution and marketing of DSB internationally? If so can you same with the Authority?
- 10. Please provide the Authority with any further information you deem necessary and asked herein.
- 11. How would it impact the car and radio manufacturers business if the Authority had to develop regulations making it mandatory for radio receivers they manufacture to have at least one digital interface?
- JetCon has no comments for all Manufacturers except that we would be prepared to partner with the Authority or the state in ensuring the success and uptake of DSB in South Africa?



Media consumption in South Africa

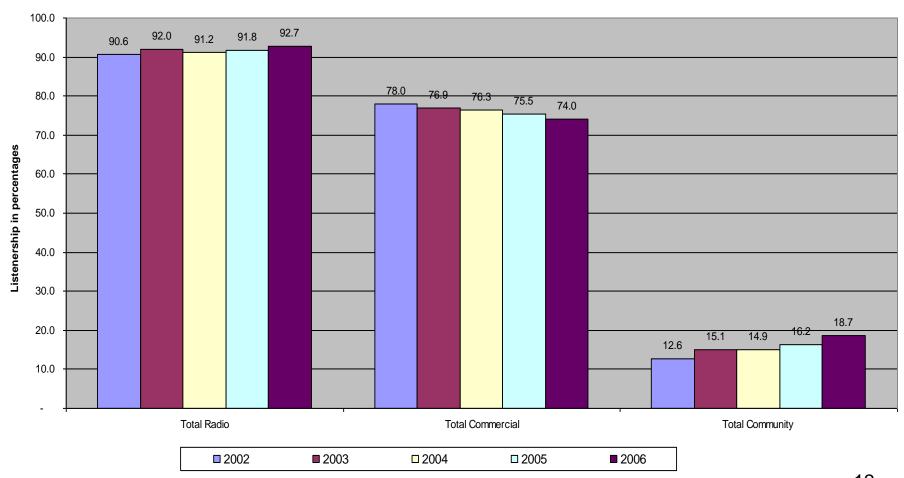
Media consumption in South Africa





Consumption of Radio in 7 days

Consumption of Radio in 7 days

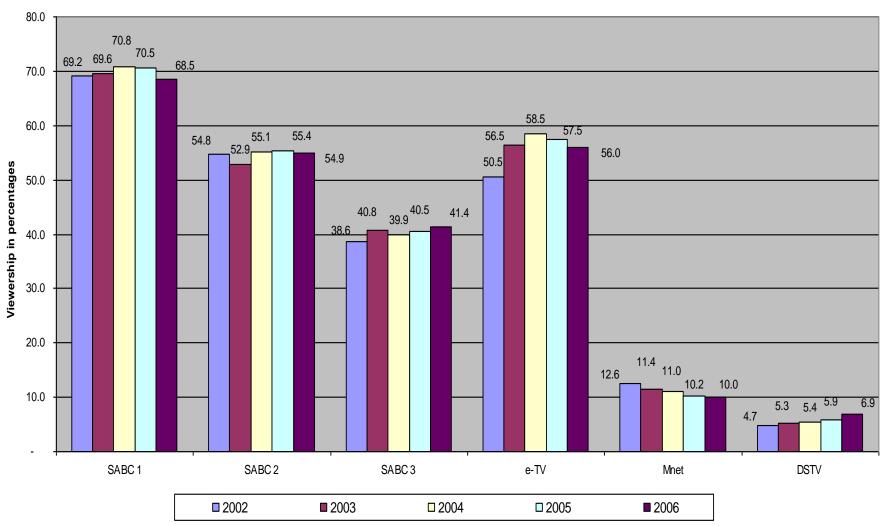


12

Television viewership by Stations JETcon



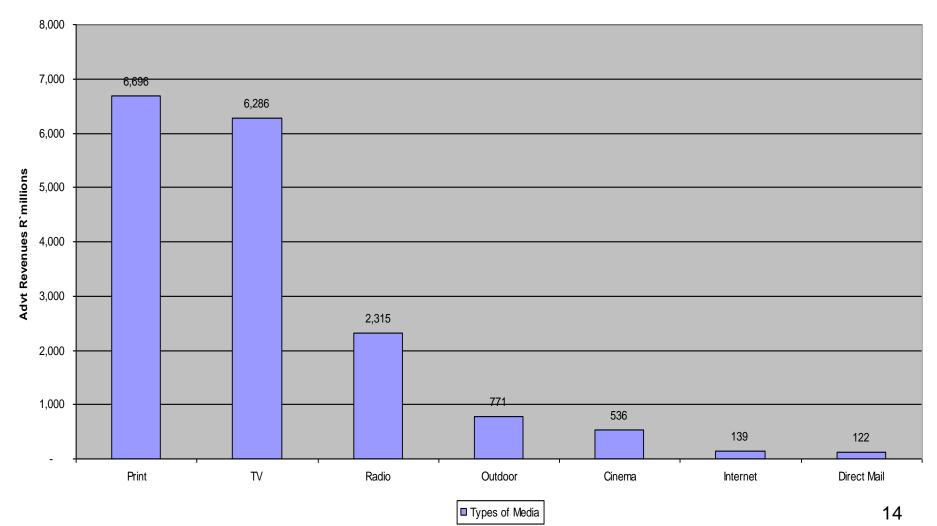
Television viewership by Stations



SA Gross advertising revenues JETcon Dec 04 - Jan 05



SA Gross Advertising Revenues Dec 2004 - Jan 2005



Source: ANC Research report 2006. www.anc.org.za and Nicholson R (CTO, SABC)

RECOMMENDATIONS



As we conclude after the industry role players have successfully tested both digital audio broadcasting (DAB+) and Digital Radio Mondiale (DRM) technologies in recent years. DAB+ is essentially a digital alternative to analogue FM broadcasts, while DRM is broadly an alternative to medium-wave and shortwave transmissions.

We therefore recommend the following:

- Based on the report from the trials, we share the belief that the South African broadcasting market is fertile for the introduction of digital radio. The introduction of digital radio will allow for industry growth and increase diversity
- Communications minister to issue a policy directive to ICASA to pave the way for the development of a licensing framework.
- ICASA should also conduct a regulatory impact assessment to look at the cost of digital transmitters/antenna's and receivers to ensure they are accessible to new entrants and ordinary people.

CONCLUSION



- Jethro Consulting Solutions ("JetCon") thanks the Independent Communications
 Authority of South Africa ("ICASA") for the opportunity to participate in the
 ICASA's Discussion Document on Digital Sound Broadcasting.
- As the Republic of South Africa's stakeholders deliberates on ICASA's discussion document on Digital Sound Broadcasting Policy and Regulatory Issues, JetCon strongly requests the ICASA to focus on resourcing and strengthening both the concerned raised by Policy Makers and Stakeholders so that they can urgently conclude all outstanding activities needed to allocate the invaluable radio frequency spectrum to existing and new ICT operators, so that they may build the modern ICT Infrastructures and deliver the services that will fuel South Africa's growth in all key national development domains, as outlined and specified in all South Africa's development plans, including the overriding NDP and the subordinate ICT related policies and regulatory provisions.



"The importance of a message is not what you say, is how you say"

 "With Convergence of ICT "Digital divide" will be eradicated through "digital inclusion" as the world "go digital" to participate in the "digital age".

» OR

 "With Convergence of ICT has compelled the world to "go digital" as we live in a "digital age", were "digital divide" still exists and can be eradicated through "digital inclusion".

Source: Chris Armstrong & Richard Collins, July 2004.



Ke a leboga

Dankie

Ngiyathokoza

Ke a leboha

Thank you

Siyabonga

Ngiyabonga

Inkomu

Ndo livhuwa

Enkosi

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