

# M-Net and e.tv presentation on change of transmission standard for digital television and MUX 2 trial

8 June 2010

The logo for e.tv, featuring a white lowercase letter 'e' centered within a red square.

# South Africa's standard

- South Africa adopted the DVB standard for digital television in 2005
- The DVB-T was selected as the standard for digital migration in 2008 when:
  - Cabinet approved DVB-T
  - Digital migration policy adopted DVB-T
- As a result:
  - The Terrestrial Broadcasting Frequency Plan is based on DVB-T
  - ICASA's final regulations on digital migration refers to DVB-T
  - SABS finalised the specification for set-top boxes using DVB-T
  - Broadcasters invested millions in DVB-T trial
- This year, Department of Communications put on the agenda the technical standard for DTT
  - Public symposium held on 29 and 30 April
  - Presentation to parliament 1 June



# Process to select DVB

- Digital Broadcasting Advisory Body appointed by the Minister in 2002
- DBAB investigated all available standards ( ATSC, ISDB and DVB) and recommended DVB for South Africa based on comparative technical analysis
- ISDB was by rejected by DBAB because:
  - Could only operate in 6 MHz environment (SA deploys 8MHz)
  - Had not been deployed in any country other than Japan
  - Cost of STB too high
- In 2006, Digital Migration Working Group again investigated the available standards and again recommended DVB as the most suitable standard for South Africa



# Standards in 2010

- Despite two independent ministerial task teams recommending DVB after a thorough investigation of all available standards - Department is now considering a change to ISDB
- M-Net and e-tv are particularly concerned about the negative impact of such a change at this late stage, particularly since ISDB has no technical advantages of DVB



# Dispelling the myths about standards

THE MYTH	THE TRUTH
<p>The DVB-T standard has become obsolete/ is problematic/ deficient.</p>	<p>DVB-T is the most widely adopted DTT system in the world, with more than 150 million receivers sold in more than 40 countries.</p>
<p>DVB-T2 is a new standard which was created because of problems with DVB-T1</p>	<p>DVB-T2 is NOT a new standard, it is simply an upgraded version of the DVB-T standard, which was developed by the DVB group for better spectrum efficiency</p>



# Dispelling the myths about standards

THE MYTH	THE TRUTH
<p>The adoption of ISDB-T will benefit local manufacturers</p>	<p>The adoption of ISDB will prejudice the local manufacturing industry, because the market for set-top boxes produced in South Africa will forever be restricted to those few countries which have adopted ISDB</p>
<p>ISDB-T is an open source standard, unlike DVB</p>	<p>DVB and ISDB are subject to the same patents, royalties and IP restrictions. In particular, royalty payments for OFDM ( the basic modulation system) and MPEG 2 and/or MPEG 4, the compression system</p>



# Dispelling the myths about standards

THE MYTH	THE TRUTH
ISDB technology is superior	<p>The technical differences between ISDB-T and <u>DVB-T1</u> are marginal.</p> <p>However, <u>DVB-T2</u> is far superior standard. E.g. DVB-T2 delivers 50% more channels</p>



# Impact of a change to ISDBT

- If South Africa changes its standard to ISDBT, the following negative consequences will follow:
  - African consensus on standard will be undermined
  - Investment already made in DVB-T will be wasted
  - Consumers will pay more for STBs
  - Delays will be caused – e.g. a lengthy ITU de-registration process will have to be undertaken
  - Lack of ISDBT technology and skills in SA will impact on local emerging manufacturers



# Change to ISDBT would undermine African consensus

- South Africa, along with the whole of Africa has already chosen the DVB-T standard
  - Both ISDBT and DVB-T have been repeatedly evaluated and DVB-T has been found to be most suitable
  - As some African countries have already commenced broadcasting on DVB-T networks, if South Africa and or SADC changes, it means that there will not be a single standard throughout the continent
  - South Africa will have to co-ordinate with neighbouring countries to avoid interference



Ability of South African manufacturers and other businesses to develop product for the whole continent will be undermined by choosing ISDB-T



# Investment in DVB-T will be wasted

- Local broadcasters, signal distributors and manufacturers have to date invested in excess of a quarter billion Rand on DVB-T
- Much of this investment would be wasted if the standard changed now



Additional government funding may be required



# Consumers will pay more for ISDB-T STBs

- ISDB-T does not offer economies of scale
  - Only eight countries have adopted it
  - This means that the price of ISDB-T decoders is still very high approximately double the cost of DVB-T ex-factory
- As the DVB-T standard has been adopted by approx 120 countries, any country using it is able to benefit from considerable economies of scale



High ISDBT STB prices will discourage consumers from adopting - government will have to pay more for STB subsidies or subsidise fewer STBs



# Delays will be caused in launching DTT and realising a digital dividend

- Time delays will be caused by changing the standard to ISDB-T – approximately 3-5 years:
  - ITU processes
  - SABS processes
  - ICASA processes
  - Local STB development etc



If government wishes to mitigate delays it will most likely have to import skills and STBs – therefore local manufacturer opportunities will be undermined



# Lack of ISDBT technology and skills in SA

- ISDB-T has not been developed or deployed for an 8MHz configuration
  - Therefore there are neither 8Mhz transmitters nor receivers for ISDBT available
  - In addition, no ISDB-T skills exist in South Africa
- In contrast, 8MHz DVB-T transmitters and receivers are widely available at reasonable cost and there are substantial DVB-T skills in South Africa



South Africa will not benefit from economies of scale if ISDBT is chosen



# Where does this leave commercial broadcasters?

- Changing the DTT standards at this late stage will hamper the success of DTT
- M-Net and e.tv are concerned why this matter is being reopened now
- We will continue to engage government on this matter - we are hopeful our concerns will be heard
- In the meantime, we will focus on preparing for commercial launch



# M-Net and e-tv join forces to trial DTT

- ICASA DTT regs require that M-Net and e.tv share a MUX
- We have therefore commenced a MUX 2 trial to ensure our preparedness for commercial launch
- Both broadcasters have been party to separate DTT trials over the last 18 months - trials successful, confirm that DVB-T transmission standard is stable and effective
- The MUX 2 trial will be the final phase in our preparation for commercial launch
  - Will test mux sharing between FTA and pay channels on a single MUX
  - will enable broadcasters to test the next evolution of DVB-T



# Conclusion

- Commercial broadcasters remain committed to bringing digital television to South Africans
- Changing significant aspects at this late stage:
  - Will delay the release of the digital dividend
  - Jeopardise the ITU deadline of 2015
- Why?
  - No problems with DVB-T
  - No benefits in changing to ISDB
- Consumers will pay the price for any change

Commercial broadcasters are ready for digital!

