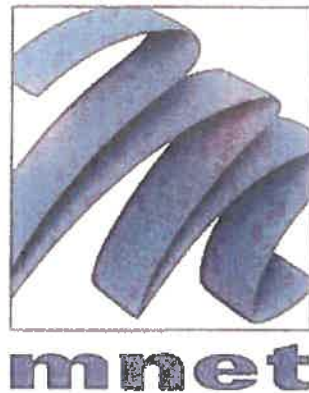




**REPRESENTATIONS BY M-NET ON
PROPOSED AMENDMENTS TO THE
BROADCASTING DIGITAL MIGRATION
POLICY**

3 January 2014



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INTRODUCTION

- 1 Electronic Media Network Ltd ("M-Net") wishes to thank the Department of Communications ("the DoC") for an opportunity to comment on the Proposed Amendments to the Broadcasting Digital Migration Policy ("the draft amendments") gazetted on 6 December 2013.
- 2 If the DoC conducts oral hearings in respect of these proposed amendments, M-Net would like to make representations at those hearings.
- 3 M-Net has a subscription television broadcasting service licence and currently provides broadcasting services using analogue terrestrial transmission technology. M-Net is one of the broadcasters (along with SABC, e.tv and community broadcasters) which will be required to migrate to digital terrestrial television ("DTT") and is thus directly impacted by the proposed amendments.
- 4 The draft amendments raise serious legal issues. We have been advised that they infringe the principle of legality and undermine the rule of law by wilfully disregarding a judgment of the High Court of the Republic of South Africa. Given the fundamental legal difficulties with the draft amendments, our submission will focus exclusively on this issue.
- 5 M-Net and our sister company, Multichoice, have in numerous previous submissions and presentations set out great detail our arguments on why an STB control system should not be included in FTA STBs. We will not repeat these arguments in this submission. However, for the sake of completeness, we attach as Annexure A, a summary of the arguments made against the inclusion of STB control in the FTA STB.
- 6 Our submission will proceed briefly as follows:
 - 6.1 We will start by setting out our understanding of the decision which the Minister is seeking to implement and the effect of the draft amendments;



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- 6.2 We will then consider the judgment of the High Court in the matter of e.tv/Min of Communications and the implications of that judgment;
- 6.3 Next, we will explain why the proposed amendments infringe the principle of legality and undermine the rule of law by disregarding a judgment of the High Court;
- 6.4 We will conclude by proposing solutions as to how to give effect to the judgment in the e.tv litigation.

EFFECT OF PROPOSED AMENDMENTS

- 7 In the Government Gazette of 6 December 2013, a number of amendments are proposed to the provisions in the current BDM Policy which deal with the STB control system. Below is an extract of a paragraph which has been added to both the Executive Summary and the Conclusion and neatly summarises the effect of the proposed amendments and the decision which the Minister is seeking to implement:

“...the use of a control system is not mandatory. However, the STBs will have a control system...”

- 8 The draft amendments draw a distinction between the implementation of STB control and the use of STB control. In essence, the amendments propose that the implementation of the STB control system is mandatory (“the STBs will have a control system”), but the use is not (“the use of a control system is not mandatory”).
- 9 It is clear from the paragraph above and from the detailed amendments proposed that the Minister is giving direction on STB control in the draft amendments and, specifically, the Minister is directing that an STB control system must be included, but that the use of such system will not be mandatory.



- 10 That the Minister is attempting to give direction on the issue of STB control in policy is significant, because the draft amendments completely disregard a 2012 decision of the High Court that the Minister has no power to make binding decisions related to STB control and no power to prescribe to FTA broadcasters how they should manage set top boxes. The details of the High Court decision are set out more fully below.

E.TV / MIN OF COMMUNICATIONS AND OTHERS

- 11 In September 2012 e.tv (Pty) Ltd ("e.tv") brought an application in the South Gauteng High Court, Johannesburg (Case No. 34694/12) ("the e.tv litigation") against the Minister and a number of other respondents (ICASA, the SABC and Sentech Ltd).
- 12 The relief sought by e.tv in that application was for an order, amongst others, as follows:
- 12.1 The decision of the Minister in the letter to the SABC dated 10 May 2012 instructing Sentech Ltd to assume responsibility for the STB control system for FTA DTT is declared to be unlawful and of no force and effect and is reviewed and set aside.
- 12.2 It is declared that e.tv and the SABC and other FTA broadcasters are responsible for the STB control system for FTA DTT.
- 13 The Court considered the EC Act and the related legislation and concluded that the Minister's role "is limited to the development of policy".¹
- 14 The Court then considered the legal effect of policy determinations. It quoted from *Akani Garden Route (Pty) Ltd v Pinnacle Point Casino (Pty) Ltd*² as follows:

¹ Para 32 of the judgment

² 2001 (4) SA 501 (SCA)



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"I prefer to begin by stating the obvious, namely that laws, regulations and rules are legislative instruments, whereas policy determinations are not. As a matter of sound government, in order to bind the public, policy should normally be reflected in such instruments."

- 15 The Court also referred to the decision of the Constitutional Court in *In the Minister of Education v Harris*³, where the Court indicated that the power of the Minister (in that instance, of Education) to determine policy does not confer a power to impose binding obligations: "the Minister's powers ... are limited to making a policy determination and he has no power to issue an edict enforceable against schools and learners".
- 16 The Court, in the e.tv litigation, and with reference to the EC Act, concluded that "the Minister has no legal power to prescribe or make binding decisions relating to set top box control" and that "the Minister does not have the power to [pr]escribe to FTA broadcasters how they should manage set top boxes".⁴ (emphasis added)
- 17 The Court accordingly granted e.tv the relief sought.
- 18 In May 2013, and following on from the judgment in the e.tv litigation, the DoC amended its invitation to local manufacturers to tender for the manufacturing of the FTA STBs, by deleting the reference to STB control from the tender.
- 19 Furthermore, on 21 May 2013 the prior Minister announced in Parliament that the Ministerial Policy would also be amended so as to make the STB control system non-mandatory. Presumably, that was so as to give effect to the judgment referred to above. The digital migration process was thus eventually poised to proceed apace.
- 20 However, despite the court decision in the e.tv litigation and work already started by the Department to give effect to that decision, the new Minister elected not to abide the decision of the court, but instead convened round table

³ 2001 (4) SA 1297 (CC)

⁴ Paras 37 and 38 of the judgment



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discussions in September 2013 with a view to reaching consensus amongst the key stakeholders as regards STB control capability.

- 21 Unfortunately, consensus could not be reached in the Roundtable Process and the Minister took the matter of amending the BDM Policy, with regards to the STB Control system, to Cabinet on 27 November 2013 for a decision to be taken on 4 December 2013. At this meeting Cabinet approved the language proposed by the Minister, namely that the use of the STB control system would not be mandatory, but the STBs would have a control system.⁵
- 22 It is not clear whether the Minister ever advised Cabinet of the judgment handed down by the High Court in the e.tv litigation or whether Cabinet was made aware that a court had determined that the Minister (and by extension Cabinet) had no authority to make a decision on STB control.

LEGAL PERSPECTIVE

- 23 In the judgment in the e.tv litigation, the Court states clearly that the Minister –
 - 23.1 has no power in law to prescribe or make binding decisions relating to the STB control system; and
 - 23.2 does not have the power to prescribe to FTA broadcasters how they should manage STBs.⁶
- 24 The South Gauteng High Court of the Republic of South Africa has issued a decision that the Minister has no power in law to make binding decisions relating to the STB Control system and yet, in what can only be described as wilful disregard of the authority of the court, the Minister has proceeded to do precisely that i.e. to make a decision relating to the STB control system.

⁵ Statement on Cabinet Meeting of 4 December 2013
<http://www.gov.za/speeches/view.php?sid=42446>

⁶ Paras 37 and 38 of the judgment



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- 25 The proposed amendments are highly problematic from a legal perspective. By purporting to regulate STB control, the Minister will be acting outside his powers in terms of the ECA. By disregarding a decision of the High Court, the Minister will undermine the rule of law. It is unfortunate that we have to remind the Department of this, but one of the founding values set out in section 1 of the Constitution is respect for the rule of law. A fundamental aspect of the rule of law is the manner in which public power is exercised. We refer in particular to the obligation of members of Cabinet to act in accordance with the Constitution (s 92 (3)(a) which addresses the responsibilities of members of Cabinet) and, specifically, the provisions of section 165(5) of the Constitution which provides that:

“An order or decision issued by a court binds all persons to whom and organs of state to which it applies”.

- 26 M-Net is dismayed at the contemptuous attitude of the Minister towards this judgment. The Minister cannot disregard a decision of the High Court.
- 27 Furthermore, it will not avail the Minister to suggest that he is merely acting on the instructions of Cabinet. The person empowered in s3 of the Electronic Communications Act is the Minister – not Cabinet. Furthermore, the proposed amendments to the BDM Policy are in the name of the Minister.
- 28 If, despite these representations, the Minister were to proceed to amend those provisions of the BDM Policy dealing with the STB control system as proposed, those amendments would be subject to judicial review (under the Constitution, alternatively under the Promotion of Administrative Justice Act, 3 of 2000) on the ground of unlawfulness..
- 29 Furthermore, any attempt by the Minister and/or the DoC to give effect to those amendments – for example by amending the invitation to local manufacturers to tender for the manufacturing of the FTA STBs so as to require the STBs to include an STB control system – would be impermissible, and would no doubt invite litigation to set aside any such amendments to the invitation to tender.



GIVING EFFECT TO THE JUDGMENT OF THE HIGH COURT

- 30 In order to act within his powers and comply with the judgment in the e.tv litigation, the Minister ought to abandon and/or delete any amendments which seek to give direction on STB control and leave this decision to the FTA broadcasters, as required by the judgment.

CONCLUSION

- 31 No person, including the Minister of Communications, may disregard a decision of the High Court.
- 32 By virtue of the statement in the judgment in the e.tv litigation that "the Minister has no legal power to prescribe or make binding decisions relating to set top box control", the proposed amendments are impermissible and unlawful.
- 33 If, despite these representations, the Minister were to proceed to amend those provisions of the BDM Policy dealing with the STB control system as proposed, those amendments would be subject to judicial review.
- 34 Furthermore, any attempt by the Minister and/or the DoC to give effect to those amendments – for example by amending the invitation to local manufacturers to tender for the manufacturing of the FTA STBs so as to require the STBs to include an STB control system – would be impermissible, and would no doubt invite litigation to set aside any such amendments to the invitation to tender.
- 35 M-Net urges the Minister to abide the decision of the High Court and act in accordance with the judgment of the High Court.



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ANNEXURE "A"

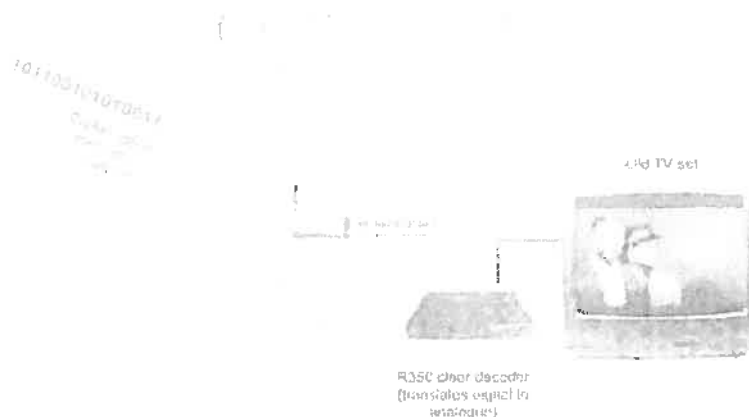
The role of an STB in digital migration

- 1 The proposed BDM Policy amendments indicate that use of a control system is not mandatory, but then still require that the FTA STB include a control system to protect government's investment in the subsidized STB market and the local electronics industry. This continued focus on STB control in the proposed amendment tends to neglect two important points about the migration to digital television. The first point is that migration is a simple technological transition from an older technology of broadcasting transmission to a newer technology of broadcasting transmission, with the STB merely being a interim device aiding consumers to continue receiving the broadcasting signal on older equipment. The second point is that the real economic value for the country of this migration to a more efficient means of digital transmission is the freeing up of radio frequency spectrum in high demand spectrum. It is not the short term manufacture of an interim device. This is highlighted in more detail below.
- 2 Currently, FTA television viewers receive an analogue broadcasting signal which is displayed on their analogue television set. This is demonstrated in the diagram below:



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- 3 With digital migration, every single terrestrial television household will need to acquire an STB by the date of analogue switch-off in order to be able to continue to receive television broadcasting services post that date. In other words if a household has not acquired an STB by that date, it will no longer receive any television broadcasting services.
- 4 A STB is required because most South Africans own analogue television sets. The STB is essentially a converter. It converts the digital television signal for reception on an analogue television set. This is demonstrated in the diagram below:



- 5 The need for an STB is transitional, since new television sets are being manufactured with a digital converter already built in, so a separate STB is not required for these television sets. This is demonstrated in the diagram below:



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 01011011011011011
 1011011011011011011
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- 6 This is the situation in the UK, where the FTA STB for DTT has been regarded as a temporary digital adaptor for viewing FTA services on outdated analogue television sets during the digital migration period. Since 2009 manufacturers in that market have been integrating digital tuners into their digital television sets.
- 7 Manufacturers in the near future will cease to manufacture analogue television sets altogether, making these STBs in the UK market redundant (see Figure 1 below). There is thus a return to a normal situation of only requiring one device – the television set – for the reception of and viewing of FTA.
- 8 However, if STB control is implemented in South Africa by encrypting FTA broadcasting services or requiring some other form of encryption that requires an STB for reception of the digital signal, this natural process will not occur. The STB will become a permanent device and consumers will forever require an STB in addition to a digital television set in order to be able to view FTA television. Some parties have proposed that there is a technical solution to this problem - common interface (CI) slots could be added to television sets to attach CA modules which would cater for STB control, but these would cost almost as much as an external STB and, for this reason, would not be a viable solution. As a consequence, South Africa would remain locked into a costly STB control solution that will not allow consumers to benefit from the high



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volume of mass-produced digital television sets which are becoming available at ever decreasing prices in other jurisdictions.

Figure 1: Television households with IDTVs in the UK⁴

TV Systems Intelligence Service

Practical guide to UK TV Digital Terrestrial

TV Households with IDTVs by Digital Terrestrial

What is STB control?

- 9 The proposed BDM policy amendments continue to refer to STB control without indicating or defining what this entails. In fact, STB control has never been clearly defined in policy, law or standards in South Africa, however the term appears to be used to refer to a proposal which will require the deployment of conditional access ("CA") technology embedded in the STB to decrypt or unscramble signals so that the service is capable of being viewed by television viewers.
- 10 The insistence by certain stakeholders and government on the inclusion of STB control in a FTA STB is highly unusual. CA technology is traditionally used by Pay TV operators so that only subscribers to those services may view those services. Although this technology is costly to implement and operate, it is critical for Pay TV operators, since it enables their collection of subscription revenue.

This figure is based on 2013 data by IHS Screen Digest and illustrates the natural progression to IDTVs as analogue television sets reach the end of their lifespan



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- 11 The proposed BDM policy amendments even agree with this assessment that it is a Pay TV technology when they state that "to avoid subscription broadcasters unfairly benefitting from the STB control system, Government's investment in the STB Control System will be recovered from those subscription broadcasters that choose to make use of the STB Control System" ² This raises the policy question of why government is funding the inclusion of an expensive Pay TV technology in the subsidized FTA STB, and requiring its inclusion in the retail FTA STB, thereby increasing the cost for manufacturers and consumers when there is no discernable public interest benefit for doing so. It is useful to consider the history of how this issue of STB control arose when considering this question.
- 12 The history as to how the issue of STB control arose in planning for South Africa's digital migration is as follows.
 - 12.1 A "control mechanism" in the STB was referred to in the Ministerial Policy of 2008 to ensure that Treasury's subsidized STBs would only work within the South African DTT network to prevent Treasury's subsidized STBs leaving the country and being used elsewhere in Africa. The nature of this control mechanism was not elaborated upon in the policy.
 - 12.2 Some local manufacturers were of the view that the inclusion of a CA system could provide such a control mechanism and at the same time prevent the South African market being flooded with low cost STBs from Asia.

² Insertion after paragraph 5.2.2.7 of the Policy by paragraph 5.1.2.7 (A), Government Notice No. 954, Government Gazette No. 37120, 6 December 2013, p 6



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- 12.3 At the time, namely in 2008, the terrestrial broadcasters (the SABC, e.tv and M-Net) appreciated those concerns, but were unanimous in opposing the encryption of FTA television broadcasting signals. This unanimous opposition is reflected in the minutes of a workshop held by the South African Bureau of Standards ("the SABS") on 20 August 2008 to discuss the STB specification.
- 12.4 The term "STB control" was then used for the first time to refer to a secure and robust system which would protect Treasury's investment in subsidizing the FTA STBs, but without the encryption of FTA television broadcasting signals, differentiating the "control mechanism" from the full CA used by Pay TV operators
- 12.5 This was reflected in the first Request for Proposals (RFP) issued by the FTA broadcasters (the SABC and e.tv), after the publication of the FTA STB standard (SANS 862.2009). The RFP clearly indicated that the FTA broadcasters wanted a low cost solution appropriate to a FTA market with no encryption of those services/signals
- 13 We raise this history to demonstrate that while the BDM Policy contemplated a "control mechanism", this mechanism was originally not intended to include the encryption of the FTA broadcasting services or the offering of Pay TV services on the FTA STB.
- 14 The understanding of what is meant by a "control mechanism" or "STB control" has changed over time. In our view, the term has been hijacked by certain commercial interests which contemplate the full CA system used by Pay TV operators being incorporated in the FTA STB.
- 15 In August 2013, M-Net contracted Futuresource, an independent research and consulting firm in the UK which focuses on the entertainment and related industries, to identify whether any other countries in the world which had embarked upon digital migration had mandated the encryption of FTA television broadcasting services.



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- 16 The research found that no other country had mandated the encryption of FTA broadcasting services. Although a number of countries (including the UK, the Netherlands and Singapore) debated this possibility, it was ultimately rejected for a variety of factors, including cost considerations, the inappropriateness of encrypting public broadcasting services and competition issues.³
- 17 Some countries have provided for the optional inclusion of CA software, but without the encryption of the FTA broadcasting services (Tanzania, Malaysia). These countries will, no doubt, be cited by proponents of STB control, but even in these countries we observe that:
- 17.1 The optional inclusion of CA was not funded by the government but by commercial operators.
 - 17.2 Those commercial operators included CA so as to enable them to provide Pay TV services on DTT.
 - 17.3 The FTA broadcasting services continue to be broadcast unencrypted.
- 18 An analysis of digital terrestrial migration worldwide indicates that many countries have commenced and some have successfully completed the process of digital migration without STB control.
- 19 With regard to the optional inclusion of STB control or CA where commercial operators consider this to be a requirement for their future DTT plans, M-Net has always been of the view that any operator may elect to include STB control, provided that this is funded by that operator and not by government.

³ The FTA terrestrial environment must be distinguished from the satellite FTA broadcasting environment. In the latter environment the broadcaster's satellite footprint may extend beyond the territory for which the broadcaster has secured the rights to broadcast the content included in its broadcasting service. That broadcaster would have to use CA to ensure that its service is not capable of being viewed in territories in which the broadcaster does not have the rights to the content. For example, in 2012, e.tv (eBotswana) successfully sued Sentech when the Sentech encryption failed and the SABC channels were broadcast into Botswana resulting in unlawful competition with the eBotswana channels in Botswana.



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- 20 The fact that the proposed BDM Policy amendments now consider recovering the costs of the STB control system from subscription broadcasters that choose to make use of the STB Control System does not mitigate concerns about competition issues, cost considerations for consumers who purchase the retail STB and retail manufacturer costs that will indirectly fund subscription broadcasters who use the system

Arguments and amendments put forward for STB control are flawed

- 21 The arguments set out below as to why STB control ought to be mandated in the FTA STBs have been raised in the BDM Policy and by certain supporters. Below each argument we explain why it has no merit

Government needs STB control to protect its investment in the subsidization of FTA STBs i.e. the concern is that those who acquire subsidized STB will sell their STBs across the border and the Treasury's investment will be lost

- 22 The draft BDM Policy amendments once again highlight this concern when it states "the STBs will have a control system to protect Government's investment in the subsidized STB market".⁴ This is further captured in the proposed amendment of paragraph 5.1.2.2 where it states "Have a control system that can be used to prevent STBs from being used outside the borders of South Africa and that can be used to disable the usage of stolen STBs;". In our view, this concern has been significantly overstated. With the South African Post Office and USAASA, the DoC has developed a system with proper controls which will ensure that the 5 million FTA STBs subsidized by Treasury will only be provided to the poorer households which qualify for the subsidy. With regard to the risk that subsidized STBs will be sold outside South Africa, we submit the following:

⁴ Amendment of paragraph 1 of the Executive Summary, and Amendment of paragraph 9 of the Policy, Government Notice No. 954, Government Gazette No.37120, 6 December 2013, p.4 and p.6.



- 22.1 If subsidized TV households sell the STB after analogue switch-off they will no longer have access to television broadcasting services and switching the STB off will not assist them or government in completing the migration to digital
- 22.2 The market for the sale of subsidized STBs is much more likely to be local. These STBs will be sold to South African television households who have not received a subsidy or to outlets like Cash Converters, rather than to neighbouring countries
- 23 The risk is so minimal it does not justify the cost of the STB control system being imposed
- STB control will protect local manufacturers from cheap foreign imports
- 24 The BDM Policy amendment alludes to this concern when it states " the STBs will have a control system to protect Government's investment in the subsidized STB market and the local electronics industry " (our emphasis)
- 25 Initially certain manufacturers (notwithstanding the costs) were supportive of STB control because the inclusion of this proprietary element would mean that low cost STBs manufactured in Asia would not work in South Africa.
- 26 However, since then mechanisms have been introduced to ensure that local manufacturers benefit from digital migration :
- (a) the Department of Trade and Industry has imposed an import duty of 15% on all imported STBs; and
- (b) the tender for the manufacturing of subsidized STBs will only be awarded to local manufacturers with suitable BEE scores.
- 27 Thus, STB control is no longer necessary to protect local manufacturers. In fact STB control has a negative impact in that it raises the costs and increases the timelines for delivery for local manufacturers.



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Government needs STB control to address its citizens through mass messaging.

- 28 The proposed amendment to paragraph 5.1.2.6 of the BDM Policy reads, "have a control system that can be used to enable mass messaging." This does not make sense as the specifications for FTA STBs which have been determined by the South African Bureau of Standards (SABS), already include the technical capability (through a royalty-free system known as MHEG 5) to offer application services which will allow government information to be conveyed to citizens on a one-to-many basis without the need for STB control. As part of the M-Net DTT trial, we used this capability to design and demonstrate an application service that could be offered by the Department of Home Affairs.
- 29 Some stakeholders in the past have suggested using STB control for individual messaging, but an STB is not an optimal device to engage with citizens individually. It is not a personal device, but rather a household device. Government already has the means to communicate with citizens on an individual basis, namely the mobile phone, which has a built-in return path for two-way communications.
- 30 In the cases of emergency, government is already able to communicate with people in specific regions and in the regional language through radio, and nationally using television. Emergency messages are also regulated by ICASA so that all broadcasters are obliged to interrupt programming to convey emergency messages at the behest of the regulator or public service institutions.
- 31 In light of the above, it is recommended that paragraph 5.1.2.6 be deleted or if kept instead be amended by the insertion of "be capable of mass messaging."



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Government needs STB control for access to government information and services

- 32 The proposed amendment to paragraph 5.1.1 of the BDM Policy read:
 'These boxes will also serve as important tools that can be used for access to government information and services if STB control is used by broadcasters.'⁵ This is a totally new amendment as it creates for the first time in the BDM Policy a link between the use of STB control and access to government information and services
- 33 This proposed amendment to 5.1.1 should be deleted as information and services, including those provided by government, will be delivered using MHEG 5 which is the open standard TV middleware or application programme interface contained in the specifications for FTA STBs published by SABS. MHEG 5 does not require STB control in order to deliver information and services as applications to the FTA STB, nor do broadcasters require STB control in order to provide access to MHEG 5 information and service apps
- 34 If the insertion is because of some thought of using the FTA STB and STB control for some type of e-transactions, it should be kept in mind that the FTA STB has no return path, nor is the STB an optimal device to engage with citizens individually. It is not a personal device, but rather a household device and any CA encryption terminates before the TV set (display). Government already has the means to communicate with citizens on an individual basis and engage in e-transactions, namely the mobile phone, which has a built-in return path for two-way communications.

Government needs STB control for a secure over the air download feature

- 35 The amendment of paragraph 5.1.2.4 of the BDM Policy by the insertion of "that can be used" suggests that government views this feature to enable service enhancement over the STB lifetime as being part of the STB control system.

⁵ Amendment of paragraph 5.1.1 of the Policy, Government Notice No. 954, Government Gazette No.37120, 6 December 2013, p.5



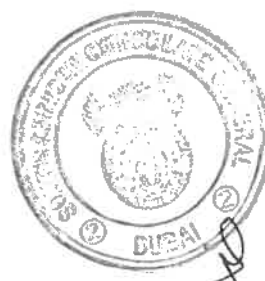
- 36 This is an incorrect view the secure over-the-air software download feature does not require encryption of the FTA signal or a third party CA provider as the specification for FTA STBs published by SABS makes provision for the use of the DVB System Software Update mechanism (DVB-SSU simple profile) specified in ETSI TS 102 006 for this purpose. Therefore it is proposed that no amendment to be made to paragraph 5.1.2.4 as it is correct as it currently appears in the BDM Policy.

STB control is required to protect FTA content

- 37 e.tv has argued in the past that that STB control is required by the Hollywood studios to protect high-definition ("HD") content. Once again, this issue has already been addressed in the official standard published by the SABS (SANS 862:2012 (Edition 2)), which requires the inclusion of High-bandwidth Digital Content Protection ("HDCP") for this purpose.
- 38 HDCP technologies protect HD digital motion pictures, television and audio against unauthorized interception and copying between a digital STB or digital video recorder and a digital television or a PC. HDCP is a specification developed by Intel Corporation to protect digital entertainment across various digital interfaces.
- 39 We know of no country where the FTA signal is encrypted. It would be strange if such a requirement was placed on South African FTA broadcasters only. For example, the BBC does not encrypt its DTT signal, and rejected encryption as a form of content protection on the basis that it would be inappropriate to encrypt public broadcasting services' content on DTT.

What would be the impact of mandating STB control on manufacturers?

- 40 The proposed amendment in the BDM Policy is very clear that although the use of STB control is no longer mandatory, the inclusion of STB control in the FTA STB remains mandatory. This mandating of STB control and thereby the inclusion of CA, would make the STB more complex and costly to manufacture, and it is likely to take a minimum of 6 to 12 months to manufacture those STBs.



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FTA STBs would therefore only become available in the market at the earliest in the second quarter of 2014.

- 41 Integrating a secure silicon based CA system in a FTA STB will require the following

41.1 Each such STB manufacturer must be licensed by the appointed CA vendor. This will involve a security audit of the manufacturer's facilities, the negotiation of a licence agreement, and the payment of a licence fee (usually in the region of 30 000 euros).

41.2 After licensing by the CA vendor, the technical integration will commence, depending upon the availability of the CA vendor's engineers.

- 42 This process is detrimental to new BEE entrants who do not have the experience in dealing with the complexities which arise from integrating encryption into an STB, nor the long term relationships with CA vendors necessary to ensure swift integration. A FTA STB with CA therefore favours incumbents who have this experience and the relationships with CA vendors.

What would be the impact of mandating STB control on consumers?

- 43 The amendments to the BDM policy are vague, so it is not 100% clear if the mandated inclusion of STB control in the FTA STB is as a "sleeping" CA or as an active CA. However, as the stated objective is to protect the subsidized FTA STBs one assumes the CA is will be active, so in addition to adding to the cost and maintenance of the STB, the inclusion of STB control in the FTA STBs would have the following long-term adverse impacts on consumers:

- 43.1 Every STB in every home would need to be authorized and activated in order to be able to receive and view the FTA broadcasting services.



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- 43.2 Once activated the STB would permanently need to be powered up to receive entitlement messages which would allow it to remain activated. This will have implications for the national electricity grid (12 million television households), and increase domestic electricity costs.
- 43.3 If an STB ceases to be activated, that household will not have access to television until the STB is re-activated.
- 43.4 Viewers will be required to call a television call centre to have their STB enabled or re-activated. This will require access to telephone facilities and the ability to afford a call to a television call centre. In other words, these will become prerequisites to access the "free-to-air" television in South Africa.⁶
- 43.5 Any failure or poor maintenance in the back office system, database or national call centres is likely to result in viewers or groups of viewers being disconnected from time to time.

What are the cost implications of STB control?

- 44 STB control in the form of CA will add costs at every level of the value chain. Usually, in a Pay TV system the cost of STB control or CA system is carried by the broadcaster. However, since it isn't mandatory for any of the broadcasters in the proposed amendments to use the STB control system it is unclear who will carry the cost of control system, the business system to manage STBs and the consumer database, the call centre, and maintenance of these systems. Since government proposes that cost recovery for STB control will be made from any subscription broadcasters using the system, it is possible that government will be liable for the operation and all costs of set-up. See Figure 2 below which maps out the increased costs in the value chain.

⁶ M-Nel's Soweto Trial demonstrated that persons using pre-paid cell phones could not afford to contact the call centre when access to the broadcast signal was lost.



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Figure 2: Increased costs throughout the value chain

Level	Additional cost	Who pays
1) Manufacturers of STBs	- STB control certification and licensing - STB hardware (chipsets) to accommodate STB control	Manufacturers
		Treasury for subsidized STBs
2) Broadcaster or Government	- STB control system - Business system to manage/ control STBs and consumer data base - Call center systems, hardware, staff, etc - Maintenance and management of these systems	SABC/e tv/community broadcasters/Sentech/DOC or 3 rd party agency
		Treasury funding
3) Consumers	Increases cost of the STB/manufacture under 1 above	Treasury will pay more for subsidizing FTA STBs Consumers will pay more for STBs sold via retail outlets

- 45 Figure 3 below sets out the likely costs for an STB control system in the form of CA which will be incurred by manufacturers and broadcasters/government. In the case of the manufacture of the 5 million FTA STBs subsidized by Treasury, the manufacturer will simply pass the costs on to Treasury, which will have to pay for the STBs.



- 46 In addition to the STB control costs that will have to be paid to the vendor of the CA/STB control systems, broadcasters or government will incur further costs for the business system they will have to purchase from a software vendor to maintain and manage those systems. In addition, they will have to establish a call centre to manage the consumer data base, activations and queries from viewers experiencing problems with installations, their need to change personal details, etc

Figure 3: Estimated value chain costs for 5 million FTA STBs subsidized by Treasury⁷

Description	Once off	Annual costs
Level 1 Costs incurred by manufacturer		
Certification of CA system per platform	R615,000	
Additional hardware required per STB (R20)	R100,000,000	
Typical CA royalty per STB	R100,000,000	
Total CA cost incurred by manufacturer	R200,615,000	
Level 2 costs for broadcaster or government if no broadcaster uses system		
CA key safe security system and encryption	R5,800,000	
CA key safe license fees annual costs		R2,940,000
Business system to manage/control CA STBs	R122,000,00	
Business system annual support licenses and fees		R19,000,000
Setup cost to establish call centre	R115,000,000	
Annual call centre cost		R540,000,000
Total additional cost for broadcaster or government	R242,800,000	R561,940,000

⁷ Exchange rate of R10 for USD used in calculations



- 47 From Figure 3 above, it is clear that the implementation STB control will result in a significant increase in cost to deliver FTA DTT to viewers in South Africa. As regards the FTA STBs subsidized by Treasury, Treasury will have to absorb 70% of the additional manufacturing costs for the subsidized portion of the STB.
- 48 Those people who do not qualify for a FTA STB subsidized by Treasury will have to pay for the increased cost of the STB.
- 49 The proposed amendments to the BDM Policy do not address who will pay for the additional costs which will have to be incurred the management, operation and maintenance of the STB control systems. Certainly, government (and indirectly National Treasury) can ill-afford to incur those unnecessary additional costs, especially in circumstances where it they are attempting to rebuilding the SABC into a financially sustainable business.

Impact on SABC

- 50 In the immediately preceding subparagraph reference has been made to the adverse cost implications the mandating of STB control in FTA STBs will have for any broadcaster using the system or government (and indirectly on National Treasury) if it has to set up call centers, data bases and business systems for the operation and maintenance of an STB control system. It is not in dispute that if the SABC were to take responsibility for the implementation of STB control it will increase the cost of public broadcasting. The costs incurred by the SABC would have to be funded by Treasury, similarly if government took responsibility for the implementation of the STB control system it would have to find budget for this item that has not previously been part of the Medium Term Expenditure Framework (MTEF).
- 51 If the intention is that the responsibility for this implementation be pushed to the SABC, we would further submit that it is inappropriate that the television broadcasting services of the SABC, as the national public broadcasting service, be encrypted. Such encryption would not accord with the mandate given to the SABC in the Electronic Communications Act, 36 of 2005 ("the EC Act") and the Broadcasting Act, 4 of 1999. It is noteworthy that in a number of jurisdictions



this issue was considered and the regulators in, for example, the UK, Italy and Germany respectively decided that it would be inappropriate to mandate the encryption of the FTA broadcasting services.

Impact on M-Net and its subscribers?

- 52 The numerous delays in the launch of DTT have had a uniquely negative impact on M-Net. The aging analogue technology used by our existing subscribers has become expensive to maintain and repair. The costs associated with maintaining and repairing the technology which services M-Net's existing analogue base are borne by M-Net's subscribers.
- 53 It is a condition of M-Net's subscription broadcasting service licence that it must broadcast its service in an encrypted form so that it service may only be received by M-Net subscribers. As a result, M-Net subscribers had to purchase an analogue STB which decrypts M-Net's transmission. The implementation of any form of STB control that would prevent the M-Net decoder from receiving FTA broadcasting services will prejudice M-Net subscribers – as they would need to purchase two STBs in order to continue to receive free-to-air services (i.e. M-Net subscribers would have to not only buy a new digital M-Net STB to replace their analogue M-Net STB, but would also be compelled, if they wanted to receive FTA broadcasting services, to also buy, at their cost, the FTA STBs incorporating STB control.).



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