

MULTICHOICE SUBMISSION

**REVIEW OF THE DIGITAL MIGRATION
REGULATIONS**

13 JUNE 2024

MULTICHOICE'S RESPONSE TO THE INQUIRY ON THE REVIEW OF THE DIGITAL MIGRATION REGULATIONS, 2012

INTRODUCTION

- 1 MultiChoice thanks the Authority for the opportunity to participate in the Inquiry on the Digital Migration Regulations.¹ We support the Authority's initiative to undertake the Inquiry and we fully agree that a fresh regulatory framework for Digital Terrestrial Television (DTT) is needed in the post-analogue switch-off world.
- 2 MultiChoice is the holder of a technology neutral subscription television broadcasting licence through which it currently offers a satellite based direct to home ("DTH") broadcasting service. In addition, MultiChoice's sister company M-Net was a terrestrial broadcaster in South Africa for many years. M-Net participated directly in the migration from analogue to digital terrestrial television and ran a DTT-only operation from 2018. MultiChoice Group also provides DTT services in a number of African countries under the brand "GOtv".
- 3 Given our experiences outlined above, MultiChoice is well placed to comment on the Discussion Document on the Review of the Digital Migration Regulations ("the Discussion Document"). We make this submission in the interests of sound regulation making, so that the regulatory framework for DTT can be strengthened. We hold the view that it is vital that a suitable framework be put in place to enable the platform to grow and thrive.
- 4 To date, the potential of DTT in South Africa has not been fulfilled. The challenges faced by the platform have been well documented in various court judgments, media reports and commissions of inquiry and makes for sorry reading. It is a woeful tale of policy inconsistency, commercial grandstanding and

¹ Notice of Intention to Conduct an Inquiry on the Review of the Digital Migration Regulations, 2012, published under Notice number 2385, Government Gazette number 50329, 22 March 2024 ("the Notice")

opportunistic litigation, factors which together contributed to innumerable delays in the migration from analogue to digital broadcasting.

- 5 On 6 July 2020 the National Planning Commission identified the digital migration process as one of two "*striking examples of what appears to be institutional failure*" that "*inevitably leads to wasted opportunity costs for the economy*". It noted that the -

*"rapid turnover of ministers and directors general, as well as the splitting of the Communications Ministry into two departments – one for Communications, and another for Telecommunications and Postal Services – exacerbated already extensive delays in meeting the digital migration deadline of July 2015, which remains uncompleted. This uncertainty has undermined a decade of convergence legislation and regulations, leaving critical policy and regulatory actions in limbo."*²

- 6 There were a variety of reasons for the delays in digital migration including the following:

- 6.1 Multiple Ministers of Communications, which caused regulatory and political instability and lack of continuity and consistency.
- 6.2 The lengthy time it took the Authority to finalise the Digital Migration Regulations which would allow broadcasters to start the migration.
- 6.3 The unnecessary debates around the DVB-T transmission standard which derailed digital migration until January 2011, when Minister Padayachee reverted to DVB-T.
- 6.4 The Department of Communications split in 2014, and the ensuing confusion as to which Minister was responsible for key issues relating to digital migration.
- 6.5 The delays in gazetting the digital switch-on date by the Minister which finally only happened in 2016.

² National Planning Commission Draft Paper: Digital Futures: South Africa's Digital Readiness for the Fourth Industrial Revolution, 6 July 2020, pgs iv, 15 and 16

- 6.6 The failure of the Universal Service and Access Agency of South Africa to purchase the required number of STBs, and litigation by STB manufacturers against the Agency in relation to the award of the tender in respect of the subsidised STBs. STBs were finally only ordered in 2020.
- 7 The upshot of the many delays is that DTT is not yet a strong commercial proposition in South Africa, even though the platform flourishes across our borders in many other African territories.
- 8 DTT should, by now, be a destination of choice for South African television viewers. But until recently the litigation between different players has continued and the commercial prospects were still uncertain.
- 9 In addition, the continual negative publicity around the delays has sent the unfortunate message that the DTT platform is unattractive, thereby further dampening consumer demand for STBs. This has been particularly difficult in the increasingly competitive environment where audiences now have the option of getting television-like programming from the many global OTT players active in the SA market. Now more than ever, audiences have options beyond terrestrial television.
- 10 As we outline below, the existing regulatory approach on DTT did not set up the platform for success. It is important that the next set of regulations provide a sound foundation for DTT going forward. DTT should be given the best regulatory chance to succeed in South Africa as it has succeeded in many other places around the world.
- 11 We therefore support the Authority's initiative to conduct an inquiry to determine what regulatory framework the Authority should formulate for digital television broadcasting, with a view to shaping the regulatory framework necessary for the successful execution of digital terrestrial television post the migration.³

³ Paras 3 and 4 of the Notice

- 12 To achieve success, we think it is important that this Inquiry is not overly narrow. The Inquiry cannot be confined only to an assessment of the 2012 Regulations (as the title of the Discussion Document suggests). There are other regulations directly relevant to the DTT framework which should not be overlooked in this review.
- 13 While we should learn from the events in the past, the Inquiry should not focus on evaluating the efficacy of past decisions which were made for the period of dual illumination. The end of dual illumination in December 2024 is fast approaching and the regulatory regime which has existed for dual illumination over the last several years is not actually that relevant any longer. It is far more important that we look forward and that a new, enabling framework be put in place. In our view, those enabling regulations should be light touch and market driven. They should provide stability, encourage investment, and ensure a diverse range of services for audiences.
- 14 The Inquiry must also take into account that sufficient spectrum for DTT services is a vital precursor for success. Because the digital dividend has already been released for IMT services and dual illumination is due to end soon, presumably the full batch of spectrum earmarked for DTT in the 7 Multiplex Plan⁴ can now become a reality. This will hopefully allow DTT operators to build commercially viable DTT bouquets, including the provision of HD channels. The mechanics of how this spectrum will be allocated and licensed is one of the key issues that must be addressed in this Inquiry. It may be necessary for instance, for the 7 Multiplex Plan to be optimised and for allocated spectrum to be replanned to allow for local and provincial multiplexes.
- 15 Finally, it is important to note that DTT exists within a broader audio-visual environment, which is currently undergoing rapid change. As the final White Paper and future legislative changes cannot be pre-empted, this review must

⁴ Annexure J of the Terrestrial Broadcasting Frequency Plan 2013, published under Notice Number 298, Government Gazette Number 36321, 2 April 2013 ("the 7 Multiplex Plan") as updated by Notice Number 801, Government Gazette Number 38005, 16 September 2014, and the Final Radio Frequency Spectrum Assignment Plan, published under Notice Number, Government Gazette Number 43341, 22 May 2020 ("the Final Radio Frequency Spectrum Assignment Plan")

necessarily take place within the confines of existing legislation. But ultimately, if DTT is to fully succeed, the draft White Paper⁵ initiatives to create regulatory parity need to be urgently brought in to allow broadcasting services, including DTT services, to operate on a more even footing with the new OTT competitors.

16 We expand on these themes below.

BACKGROUND TO DTT REGULATION DURING DUAL ILLUMINATION

17 We begin with some background to the development of DTT regulation in South Africa.

18 It is important to consider this broader background as it reflects the gradual development of policy that the Authority had to contend with and take into account when creating and implementing the regulatory framework for DTT during the dual illumination period. The policy background included:

18.1 The White Paper on Broadcasting Policy⁶ catering for the three tiers of services – public, commercial and community.

18.2 The adoption of the DVB family of standards by Government and the South African Bureau of Standards (SABS).

18.3 The ECA licensing framework.

18.4 The Ministerial policy direction to the Authority to consider allocating spectrum for the provision of mobile broadcasting services.

18.5 The outcomes of ITU RRC-06 and the required amendments to the radio frequency plan, bearing in mind the interim and transitional nature of the two national and two metropolitan frequency networks (multiplexes) identified during ITU RRC-06.

⁵ Draft White Paper on Audio and Audiovisual Media Services and Online Content Safety: A New Vision of South Africa, published under Government Gazette number 49052, Notice number 1934, 31 July 2023 ("the draft White Paper")

⁶ White Paper on Broadcasting Policy, Department of Communications, 4 June 1999

- 18.6 The Broadcasting Digital Migration Working Group (BDMWG) recommendations.⁷
- 18.7 The Broadcasting Digital Migration (BDM) Policy.
- 19 The BDM policy was foundational and it was amended a few times. It included policy statements on, amongst others, the:
 - 19.1 Switch-on date for DTT and switch-off date for the end of dual illumination.
 - 19.2 Public national multiplex and commercial national frequency network for DTT reserved for incumbent broadcasters.
 - 19.3 Introduction of mobile broadcasting services on the two metropolitan frequency networks for DTT.
 - 19.4 Need to include community television broadcasting services in the framework.
 - 19.5 Need to introduce new services and licensees to facilitate diversity of ownership and content of the broadcasting sector.
 - 19.6 DTT coverage objectives.⁸
- 20 The regulatory framework for DTT in the dual illumination period, which was put in place by the Authority, was to a large extent shaped by these broader policy developments.

Terrestrial Broadcasting Frequency Plan

- 21 The Authority took the first steps in developing its regulatory framework in November 2009 with the publication of the Terrestrial Broadcasting Frequency

⁷ Consolidated Report of the Digital Broadcasting Migration Work Group (DBMWG): The Proposed Switchover From Analogue Broadcasting to Digital Broadcasting In South Africa, 17 November 2006

⁸ Broadcasting Digital Migration Policy For South Africa, 2008 published under Notice number 958, Government Gazette number 31408, 8 September 2008

Plan.⁹ (The radio frequency plan would subsequently be amended a number of times to deal with amongst others the introduction of Mobile TV broadcasting¹⁰ and the digital dividend¹¹.)

- 22 It is important to note that the initial allocation of the two national and the two metropolitan frequency networks in this plan was merely a transitional arrangement that was made in the context of congestion and the decision to undertake a shortened, three year dual illumination period. This resulted in planning that did not take into proper consideration how, for example, regional and community broadcasting services would be dealt with.
- 23 For instance, the RF planning for the 7 Multiplex Plan impacted on the local nature of community broadcasting, dramatically increasing the cost of community TV signal distribution. In terms of the plan, community broadcasters would have to increase coverage from city-wide coverage to a province-wide multiple transmitter network which non-profit organisations are ill-equipped to fund. The proposal to include licensed community TV broadcast on DTT Multiplex 1 was also made for a transitional period when there was insufficient radio frequency spectrum to create more Multiplexes. This should now be revisited.
- 24 A further element which will need to be considered in future is whether it is still necessary to have an allocation for mobile television broadcasting.
- 25 In September 2007, the Minister directed the Authority¹² to consider allocating spectrum for mobile television broadcasting, which was highly anticipated at the time. In line with the ITU RRC-06 plan, the Authority made provision for two metropolitan multiplexes for mobile television broadcasting in the Terrestrial Broadcasting Frequency Plan, 2008, and, in April 2010, published the Mobile

⁹ Notice of Publication of Final Terrestrial Broadcasting Frequency Plan, 2009 published under Notice number 1538, Government Gazette number 32728, 18 November 2009

¹⁰ Second Draft Terrestrial Broadcasting Frequency Plan, 2009 published under Notice number 960, Government Gazette number 32385, 6 July 2009

¹¹ The 7 Multiplex Plan

¹² Policies and Policy Directions drafted in terms of section 3(1) and (2) of the Electronic Communications Act, 2005, published under Notice Number 876, Government Gazette Number 30308, 17 September 2007, para 5

Television Regulations.¹³ Although services were subsequently licensed, the DVB-H mobile television broadcasting transmission was overtaken by advancements in mobile telecommunications standards and the licensed broadcasting services terminated their mobile TV transmissions on MDTT 1 in 2018.

26 Going forward, it is likely that the Terrestrial Radio Frequency Plan and the 7 Multiplex Plan will need to be reviewed with a view to supporting a broad range of future DTT services at national, regional and local level as well as new transmission standards for 5G Broadcasting post the ASO and ensuring sufficient spectrum, including room for growth, for broadcasting services.

Digital Migration Regulations

27 Following the Terrestrial Broadcast Frequency Plan, the next step in the regulatory framework for DTT was the development of regulations to govern the dual illumination period – the digital migration regulations.

28 The Authority went through an extensive public consultation process on different sets of digital migration regulations and public hearings in 2008 and 2009. At the hearings in 2008, M-Net noted the three year dual illumination proposed in the BDM Policy, but explained that it was in a unique position, unlike the free-to-air broadcasters, in that it was able to do a hard switchover using its existing licensed radio frequency spectrum for M-Net and CSN in the metros and rollout a DTT network through Orbicom.¹⁴ The Authority published DTT regulations on 3 July 2009¹⁵ that allowed M-Net to conduct a hard switchover and create a third multiplex using its existing frequencies. It was allocated 50% capacity on this

¹³ Mobile Television Regulations, 2010, published under Notice Number 318, Government Gazette Number 33125, 16 April 2010

¹⁴ Presentation by M-Net on Draft Broadcasting Digital Migration Regulations at ICASA Public Hearings on 28 November 2008

¹⁵ Digital Terrestrial Television Regulations, 2009, published under Notice number R. 720, Government Gazette No. 32377, 3 July 2009 ("the 2009 Regulations")

multiplex. The idea was that M-Net could apply at the end of the hard switchover for additional channel authorisation.¹⁶

- 29 The stage seemed set for a roll-out of DTT services. M-Net commenced positioning itself for a hard switchover over a period of 12 months. It was envisaged that a competitive and economically feasible DTT subscription broadcasting service would be in place before the end of 2010 and that M-Net subscribers would be watching the 2010 World Cup in high quality digital definition. Regrettably, this did not happen. In September 2009, the Authority withdrew the regulations.¹⁷ After receiving submissions and another set of public hearings, the Authority published new regulations in February 2010 which removed the hard switchover.¹⁸
- 30 However, this was not the end of it. In September 2011 these new regulations were also repealed and after a further round of public consultation, in December 2012 the Authority published, for the third time, final digital migration regulations.¹⁹
- 31 As could be expected, when the first set of regulations were repealed in 2010, the digital migration process essentially stalled as no broadcasters were prepared to invest in the face of such regulatory uncertainty.
- 32 The negative climate was compounded by other developments. There was turmoil as a result of debates around changes to the transmission standard and there were also multiple amendments to the date of ASO, coverage requirements and aspects relating to the set top box control mechanism. This in turn led to amendments to the SABS DTT set top box decoder standard on a number of occasions over the years.

¹⁶ Para 4(5)(c) of the 2009 Regulations

¹⁷ Explanatory Memorandum on the Decision to Withdraw and Republish the Draft Digital Terrestrial Television (DTT) Regulations for Public Comments, 2009, published under Notice number R. 896, Government Gazette number 32559, 4 September 2009

¹⁸ Digital Migration Regulations, 2010, published under Notice number R97, Government Gazette number 32956, 15 February 2010

¹⁹ Digital Migration Regulations, 2012, published under Notice number 1070, Government Gazette number 36000, 14 December 2012

33 A key challenge to overcome going forward will be to reduce regulatory uncertainty and put in place clear, consistent and stable regulations which incentivise and encourage investment in the DTT platform.

Promotion of Diversity and Competition Regulations

34 A further set of regulations relevant to DTT, are the Promotion of Diversity and Competition on Digital Terrestrial Television Regulations published on 22 August 2014.²⁰

35 Notably these Regulations created DTT Multiplex 3 by amending the Mobile Television Regulations 2010 to do away with the Mobile TV second multiplex and repurpose it as DTT Multiplex 3. The intention was to introduce competition into the DTT market by allowing new entrants to use 45% capacity on the multiplex for commercial subscription television and 55% for commercial free to air television.²¹ These regulations prescribed conditions for the assignment of excess channel capacity on DTT Multiplex 1 as well as the conditions for capacity assignment and procedures for channel authorisation on DTT Multiplex 3. There have been attempts to licence Multiplex 3 and 4, but these have only been partially successful.

36 It should be noted that Multiplex 3 and 4 were once again a transitional measure due to congestion in the broadcasting frequency bands. These multiplexes were the two metropolitan networks identified in ITU RRC-06 plan and later in the Terrestrial Radio Frequency Plan, as amended. The idea was that after ASO, the third DTT Multiplex would be transitioned into one of the national DTT multiplexes in the 7 Multiplex Plan.

37 Once again we emphasise that the 7 Multiplex Plan will need to be reviewed with a view to supporting a broad range of future DTT services at national, regional and local level as well as new transmission standards for 5G broadcasting post

²⁰ Promotion of Diversity and Competition on Digital Terrestrial Television Regulations, 2014, published under Notice Number 682, Government Gazette Number 37929, 22 August 2014

²¹ Para 5(1)(a) of the 2014 Regulations

the ASO, and to ensure sufficient capacity for the future growth of digital broadcasting.

Learnings

38 We have dealt with the background in some length. The purpose is not to dwell on the past, but to assist the Authority in looking forward to creating an enabling post-ASO environment, with the benefit of understanding how and why certain regulatory positions were reached.

39 As the above background demonstrates:

39.1 Numerous policy, legislative, regulatory and other processes took place from 2005 to date, which have resulted in the DTT situation we are in today.

39.2 Three key sets of disparate regulations were introduced over several years, namely the Mobile Television Broadcasting Regulations, the Digital Migration Regulations, and the Promotion of Diversity and Competition on Digital Terrestrial Television Regulations. Along with the terrestrial broadcasting frequency plan, these three disparate sets of regulations make up the regulatory framework for digital migration and DTT in South Africa.

39.3 Each of these sets of regulations was introduced within a specific context and for a specific purpose:

39.3.1 The Mobile Television Broadcasting Regulations were prescribed in 2010 to provide a regulatory framework for the licensing of spectrum for mobile television broadcasting services and related matters.

39.3.2 The Digital Migration Regulations were prescribed in 2012 with a focus on migration from analogue to DTT, including dual illumination and ASO, associated time frames and transitional spectrum allocation to facilitate the progressive

dual illumination and phased digital migration of existing analogue terrestrial television services.

39.3.3 The Promotion of Diversity and Competition on Digital Terrestrial Television Regulations were prescribed in 2014 to promote diversity and competition on the DTT platform and, to that end, to provide for the allocation of capacity (on Multiplex 3) and associated provisions.

39.4 The DTT regulatory framework was developed within the context of the particular constraints at the time. The Regulations reflect the specific context in which dual illumination had to take place in South Africa, including -

39.4.1 Congestion: The availability of only two multiplexes (later increased to three multiplexes) meant that broadcasters had no choice but to share.

39.4.2 Spectrum constraints: As a result of the congestion and spectrum constraints, there was limited space for incentive channels. As a result, there was insufficient spectrum available for a commercially viable bouquet for commercial DTT broadcasters.

39.4.3 The congestion and spectrum scarcity also meant that the authorisation of new channels and matters such as engineering channel and data services were important to deal with carefully. This will be less of an issue going forward.

39.4.4 Limited spectrum also meant that there were limited options for how to deal with community broadcasters.

39.4.5 The authorisation to use capacity in DTT1 and 2 in terms of the Digital Migration Regulations was only ever a transitional arrangement pending final analogue switch off. It was always expected that after analogue switch-off the Authority would

conduct a digital restacking and implement the 7 Multiplex Plan, which provides for the transition into the post-migration assignment plan.

39.4.6 Unfortunately, digital migration took much longer than expected, as a result of which some of these regulations have been in place for over 14 years and the ability to optimise and implement the 7 Multiplex Plan has been delayed.

40 Much of the DTT regulatory framework was only ever intended to be transitional in nature, given the phased shift to digital broadcasting. It was always envisaged that these arrangements would be revisited at the time of ASO.

41 We are encouraged that there is now an opportunity to build a stronger footing for DTT in South Africa. It is a positive development that the Authority has taken the first important step, through initiating this Inquiry, to determine the post-ASO regulatory framework for DTT.

Implications for this Inquiry

42 It is clear that this Inquiry must include consideration of:

42.1 Digital Migration Regulations 2012;

42.2 Promotion of Diversity and Competition on Digital Terrestrial Television Regulations 2014;

42.3 Mobile Television Regulations 2010; and

42.4 Terrestrial Broadcasting Frequency Plan 2013, as amended, as well as the Final Radio Frequency Spectrum Assignment Plan for the Frequency Band 470 to 694 MHz.

43 We suggest the Inquiry should be focused on the following-

43.1 developing the optimal regulatory approach to facilitate the future success of the digital terrestrial television broadcasting platform;

- 43.2 providing for the licensing of the spectrum allocated to broadcasting services in terms of the 7 Multiplex Plan (and where necessary optimising this plan, e.g., to cater for local, provincial and national services); and
- 43.3 creating an enabling regulatory environment that provides regulatory certainty and stability, encourages investment, and which is not overly complicated, thus allowing the existing terrestrial broadcasters and new entrants to provide innovative and exciting content to viewers.

APPROACH TO REGULATION IN THE POST ASO ENVIRONMENT

44 Having considered the background, we now make recommendations as to the approach to be taken in this Inquiry.

General approach to regulation in the post-ASO environment

45 While the draft White Paper is not binding, it specifically addresses DTT and usefully lists the following issues which the Authority may wish to consider within the constraints of the existing legislative framework:

- 45.1 The Authority is directed to conduct a review to put in place a licensing framework for DTT post ASO and determine the capacity on multiplexes required by the existing broadcasting service licensees.
- 45.2 The allocation of capacity under the 2012 Regulations was an interim solution due to scarcity of radio frequency and post-ASO the Authority can consider allocating additional capacity.
- 45.3 The interim solution and capacity constraints resulted in a hybrid of standard definition (SD) and high definition (HD) channels. Post-ASO capacity for HD channels on DTT platform needs to be considered.
- 45.4 The Authority should consider the availability of public, community and commercial audio broadcasting services on audio bouquets on DTT as currently only the radio stations of the public broadcaster are available on DTT platform.

- 45.5 There was a policy concern that the allocation of 15% capacity to community TV broadcasters on DTT Mux 1 had an unintended consequence of elevating Community TV broadcasters from local to provincial/regional broadcasters due to how national Single Frequency Networks (SFNs) were planned. The Authority was directed to investigate alternatives that will allow for community TV to remain local, such as radio frequency planning for local television DTT multiplexes.
- 45.6 The Authority post ASO should consider, in addition to local level, the introduction of provincial/regional public, commercial or non-profit free-to-air audiovisual content services on the DTT Platform.
- 45.7 The DTT Platform is supported in areas where there is no terrestrial coverage with a satellite DTT gap filler. The satellite TV platform has also become critical for commercial free-to-air and subscription broadcasting services. The Authority was therefore directed to investigate and introduce mitigating solutions for harmful interference caused by licensing of fixed service links in the satellite band.
- 45.8 The legacy issue of issuing radio frequency licences to both the broadcasting service licensee and the electronic communication network service (ECNS) licensee on the DTT platform was acknowledged. It was proposed that the legacy analogue broadcasters *"must be migrated on no less favourable terms and should obtain radio frequency spectrum licences for DTT multiplexes. However, the licensing of new DTT multiplexes going forward should require the issue of the radio frequency spectrum licence to only the ECNS. The ECNS would then be legally obliged to carry AAVCS licensed by the regulator and assigned capacity on the DTT multiplex."*²²
- 45.9 It was highlighted that *"Radio Frequency spectrum remains a critical resource for terrestrial broadcasting services and sufficient spectrum*

²² Para 3.5.3 of the draft White Paper

*needs to be available to cater for current and future needs leading up to 2030 and beyond."*²³

46 We fully recognise that the White Paper is not finalised and that the Authority must perform its functions and exercise its powers and duties in accordance with the existing legislative framework.²⁴

47 However, the Authority can also consider the majority of the draft policy considerations listed in paragraph 45 above, to the extent that their implementation does not require any amendment to existing legislation.

48 In developing the post-ASO regulatory framework for DTT, the Authority should also consider the need to level the playing field between traditional broadcasters and on demand content service providers by reducing the regulatory burden on broadcasting service licensees.

49 Another key issue for consideration is how multiplex capacity will be licensed going forward, having regard to the existing legislative framework, including the differentiation between individual and class licences, service and spectrum licences, and the three-tier broadcasting model.

50 Additionally, a simple, quick and fair approach to channel authorisation consistent with other regulatory instruments will be necessary to address the existing lacuna for free-to-air broadcasting channel authorisation.

51 We deal with these matters further below.

Radio Frequency Spectrum

52 The manner in which radio frequency spectrum is planned and assigned will be critical for the future prospects of DTT.

²³ Paras 3.5.18 of the Draft White Paper

²⁴ The Authority is a creature of statute and it cannot implement the Draft White Paper licensing framework in terms of expanding the scope to include OTT on-demand content services or stop the practice of issuing the radio frequency spectrum licence to both the broadcasting service licensee and the ECNS until the necessary amendments have been effected to its enabling legislative framework

7 Multiplex Plan

- 53 A consolidated set of regulations for DTT should set out clearly what the 7 Multiplex Plan means for both existing DTT broadcasters and potential new entrants, while also ensuring that sufficient spectrum is retained for broadcasting now and in the future, including for broadcasting adjacent services and broadcasting using new technologies.
- 54 In the post-ASO DTT landscape the planning of the 7 Multiplex Plan to deliver on national, provincial and local level broadcasting requirements will need to be revisited for the purposes of planning assignments that deliver on policy and industry outcomes.
- 55 We therefore urge the Authority to consider issues such as -

- | | |
|------|--|
| 55.1 | what additional capacity is earmarked for existing DTT broadcasters; |
| 55.2 | available capacity for new broadcasting entrants; and |
| 55.3 | how community broadcasters will be dealt with in line with community broadcasting policy to avoid unduly increasing their costs. |

Reallocation of mobile TV frequencies

- 56 We note that the post-migration assignment plan (7 Multiplex Plan) does not differentiate between mobile broadcasting or other broadcast networks, but merely provides for 7 multiplexes and frequencies that can be deployed with significant flexibility in terms of the transmission mode.
- 57 Taking into consideration that mobile television broadcasting transmission was overtaken by advancements in mobile telecommunications standards and the licensed broadcasting services terminated their mobile TV transmissions on MDTT 1 in 2018, it makes sense that the Authority consider in this review whether the radio frequency spectrum should be re-allocated to DTT multiplexes or be used to allow for the introduction of new broadcasting technologies (e.g. 5G broadcasting) and PMSE (programme making and special events).

58 The current assignments for M-DTT1 should be re-evaluated together with the policy position on mobile TV broadcasting in the 2010 regulations. The Authority should decide whether the existing capacity that had been earmarked for mobile broadcasting should be reallocated for other broadcasting and broadcasting-adjacent / broadcasting-related purposes.

5G Broadcast

59 Mobile TV using the DVB-H standard failed in the main because the standard was never included in mobile cellular phones as an additional standard to 3G, 4G and 5G, unlike Bluetooth and Wi-Fi which received widespread adoption in all brands. Although the DVB-H standard failed to be adopted, experts still see a place on DTT for some form of mobile or out-of-home consumption of linear and/or non-linear content.

60 This need could be addressed by 5G Broadcast, which allows for delivery of content to large numbers of concurrent users on mobile devices, without taking up cellular bandwidth by using an existing DTT transmitter network. In addition to broadcast and pop-up video services, the standard also allows for multicast data delivery to Internet of Things (IoT) applications, thereby creating opportunities for introducing new services in the broadcasting bands on the DTT platform.

61 The Authority must ensure that space is left to accommodate new services such as 5G Broadcast, as well as trial new services and provide special events broadcasts. Space in the terrestrial broadcasting frequency bands also needs to be retained for television production that requires transmission capacity for wireless production equipment (PMSE). Wireless production technology is not only used by broadcasters, but is a critical aspect of creative and cultural industries for use at concerts, theatres and special events. There is no alternative spectrum that meets the use case and can provide the required transmission capacity.

Sufficient spectrum for broadcast services

62 We believe it is critical that the Authority maintain sufficient spectrum for broadcasting services. There should therefore be no further digital dividend spectrum allocated for IMT use in the television bands. These bands should be permanently allocated for broadcasting and creative/cultural use. In time it is anticipated there will be further pressure on the DTT Multiplexes to accommodate improved picture quality beyond HD and as more 4k content and 4k television sets become available. This will put pressure on the number of television and audio channels that can be supplied on DTT multiplexes.

63 It is critical that radio frequency planning for DTT be focused not only on short term licensing but also the long term future needs of the sector. This requires not only focusing on DTT broadcasting services to the home but also mobile and out of the home use delivered via the DTT platform. Radio frequency in the terrestrial broadcasting radio frequency band should also be reserved for trials, special events and PMSE.

64 Sufficient spectrum must be safeguarded for future use by broadcasting and broadcasting-adjacent technology and services such as PMSE.

JSAG

65 We recommend that the Authority continue to provide for the existence of the Joint Spectrum Advisory Group (JSAG) to provide assistance and advice when developing the revised radio frequency plan for DTT.

Licensing and channel authorisation

66 The licensing framework in the ECA provides for three tiers of broadcasting, namely public, community and commercial (with the latter including free-to-air and subscription). It distinguishes between individual and class licences and also distinguishes between service and spectrum licences. In implementing a post ASO regulatory framework, the Authority will therefore necessarily have to

provide for the three tiers when issuing licences, including free-to-air and subscription.

67 The licensing process in the post-ASO environment should be an enabling one that provides stability, encourages investment and promotes the provision of a diverse range of services to audiences.

68 We envisage that the licensing process will need to take into account licensing additional multiplex capacity -

68.1 to existing broadcasters, including the public broadcaster; and

68.2 for new entrants, including both commercial and community players.

69 The Authority will also need to decide the appropriate process to be followed to licence multiplex capacity, whether by auction, beauty contest or a hybrid model, taking into account the social benefits of broadcasting.

70 As far as the authorisation of channels is concerned, we note that the Authority has tech neutral regulations prescribing processes and procedures for subscription broadcasters to apply for the authorisation of new TV channels being added to their services. However, there is no similar tech neutral channel authorisation for free-to-air broadcasters. The current channel authorisation regime is specific for the DTT platform in the current Digital Migration Regulations. The result is a legal lacuna, where free-to-air broadcasters only apply for channel authorisation for the DTT platform and not for satellite.

71 We recommend that this lacuna be addressed by introducing new tech neutral regulations for free-to-air channel authorisation.

72 In addition to broadcasting services, there is a range of interactive data services (such as games and information services) that can be pushed via the digital transmissions to the set top box and stored in memory on the set top box.

73 We recommend that as the multiplexed broadcast transmission includes data broadcasting or multimedia digital content that can be produced with text,

graphics, photographs, audio and/or video, this be considered as part of the broadcasting service activity and not an activity that requires a separate ECS licence.

74 This is in line with the existing definition of "broadcasting service" in s1 of the ECA, which contemplates that a broadcasting service can include a measure of data or text. (Broadcasting service does not include a service which provides no more than data or text, whether with or without associated still images.)

RESPONSE TO SPECIFIC QUESTIONS

75 Against this background, our response to specific questions posed in the Discussion Document are set out in Annexure A as appropriate.

CONCLUSION

76 MultiChoice thanks the Authority for the opportunity to participate in in the inquiry.

77 A sound regulatory framework is needed so that digital terrestrial television services can grow and thrive in the post-ASO world.

78 With the imminent switch-off of analogue terrestrial television on the horizon, the inquiry should focus on providing a clear framework for how DTT services will be licensed and regulated after ASO has been completed, when spectrum constraints will be less pronounced and the 7 Multiplex Plan can be optimised and implemented.

79 We urge the Authority to review the Digital Migration Regulations, the Mobile TV Regulations and the Promotion of Diversity and Competition on DTT Regulations holistically and develop an enabling framework that provides stability, encourages investment and provides a diverse range of services to audiences.

80 We trust that our comments will assist the Authority to shape the post-migration regulatory framework for the successful execution of digital terrestrial television.

81 MultiChoice requests an opportunity to make an oral presentation should the Authority hold hearings.

ANNEXURE A: RESPONSES TO SPECIFIC QUESTIONS

- 1 Our response to specific questions posed in the Discussion Document are set out below, as appropriate, grouped thematically.

MULTIPLEX ALLOCATION

QUESTION 1

In considering international practices such as the UK's competitive bidding for Multiplex allocation and Australia's mix of competitive allocation and licensing processes, what insights and recommendations do stakeholders offer for the assignment of Multiplexes in South Africa's DTT framework, aiming to ensure fairness, competition and sustainability within the three-tier system?

QUESTION 2

How do stakeholders perceive the current capacity allocations within the DTT Multiplexes, especially in Multiplex 1 where the SABC holds 85% and community broadcasting services have been allocated 15%?

QUESTION 2.1

Considering the ongoing licensing process for the remaining 15% in Multiplex 1, what recommendations or insights do stakeholders have regarding the equitable distribution of this capacity?

QUESTION 3

Similarly, in Multiplex 2, where e.tv initially had 50% and M-Net had 40%, with the remaining 10% used by temporary licence holders and later divided equally between e.tv and M-Net, are there suggestions for improving the allocation in Multiplex 2?

QUESTION 4

For Multiplex 3, where 55% is assigned to commercial free-to-air television broadcasting services and 45% to commercial subscription broadcasting services, and considering the specific licence awarded to Kwese Tv for 55% of MUX 3 capacity, what are stakeholders' perspectives on the balance between free-to-air and subscription services?

QUESTION 4.1

Are there recommendations for ensuring diversity and competition within this multiplex?

QUESTION 5

Overall, what considerations and recommendations do stakeholders propose to enhance the effectiveness and fairness of the DTT Multiplex capacity allocations?

QUESTION 6

Stakeholders are requested to provide insights and recommendations on ensuring efficient spectrum use, including considerations for frequency reuse where appropriate.

QUESTION 7

How should the Authority allocate the remaining MUXes?

QUESTION 8

How can the lessons learnt from Multiplex sharing during the transition from analogue to digital be applied in the future?

- 2 The existing multiplex allocations were a transitional arrangement pending analogue switch off. They were determined at a time when there was insufficient spectrum to create more multiplexes or to assign a full multiplex to each migrating national television broadcaster.
- 3 It was always expected that after analogue switch-off the Authority would conduct a digital restacking and implement the 7 Multiplex Plan, which provides for the transition into the post-migration assignment plan
- 4 The 7 Multiplex Plan should now be reviewed and optimised with a view to supporting a broad range of DTT services at national, regional and local levels, and ensuring sufficient frequency spectrum for the future growth of digital broadcasting, new transmission standards for 5G broadcasting and broadcasting-adjacent services (e.g. PMSE).
- 5 It is not appropriate for the SABC and local community broadcasting services to share a national multiplex as is the current case. The SABC is obliged to make its services available throughout the Republic²⁵ whereas local community broadcasters serve the interests of a relevant community, whether that is

²⁵ s8(a) of the Broadcasting Act, 1999

geographically founded by locality or defined by a specific local interest and not the entire public. A community of interest does not have to only be defined as local in geographic scope, a community of interest that is formulated by shared common language e.g. Hindi or Portuguese or German or religion or other type of shared interest may be provincial in scope or even national. These types of broader community of interests may be licensed on a national multiplex shared with the public broadcaster, but it would make no sense from a public interest perspective to license a local community broadcaster whose focus and programming is defined narrowly as addressing the citizens of a city, like Gqeberha for example, on a national multiplex. In such a case it would be more appropriate to ensure the availability of radio frequency spectrum in the terrestrial broadcast frequency plan to create local and/or provincial multiplexes to address the needs of local or provincial defined communities of interest.

- 6 It should be kept in mind that the sharing of DTT Multiplex 2 between e.tv and M-Net was the result of the interim arrangement due to spectrum scarcity. The sharing arrangement brought a host of complications for both commercial broadcasters, as it was not based on any commercial rationale. One complication was that Sentech rolled out a network based on government policy and not commercial planning. The result was that the DTT network coverage roll-out was more than that required by e.tv or M-Net and both broadcasters were not prepared to fund the additional geographic coverage which was beyond the scope of their licensed analogue radio frequency geographic coverage areas. Another complication was that, in analogue. e.tv and M-Net did not share the same size geographic coverage and the economic drivers for coverage between a commercial free-to-air and a subscription broadcaster are different. In future, if broadcasters are going to share a multiplex there should be mutual agreement between them on the geographic coverage and it is this agreement that should guide the signal distributor on network roll-out.
- 7 International examples are always useful to look at but at the end of the day the Authority is a creature of statute and must implement the licensing model according to the legislation that is in place.

- 8 In reviewing and optimising the 7 Multiplex Plan, we urge the Authority to consider issues such as -
- 8.1 what additional capacity is earmarked for existing broadcasters;
 - 8.2 how community broadcasters will be dealt with in line with community broadcasting policy to avoid unduly increasing their costs;
 - 8.3 means to ensure sufficient capacity is reserved for digital broadcasting now and in the future, including on new transmission standards and broadcasting-adjacent services (e.g. PMSE);
 - 8.4 whether it is still necessary to have an allocation for mobile television broadcasting; and
 - 8.5 available capacity for new broadcasting entrants.
- 9 The 7 Multiplex Plan should be reviewed and optimised in a transparent and consultative manner, with a view to creating an enabling regulatory environment that provides regulatory certainty and stability, encourages investment and room for growth, and allows existing terrestrial broadcasters and new entrants to provide innovative and exciting content to viewers.

LICENSING ISSUES

QUESTION 9

From a broadcaster's perspective, how does the length of the license renewal period influence long-term investment decisions in infrastructure and content production?

QUESTION 10

What are stakeholders' perspectives on the consequences of assigning digital incentive channels to broadcasters?

QUESTION 10.1

Do stakeholders believe this allocation is essential in the Digital Terrestrial Television (DTT) environment?

QUESTION 11

What factors should be considered to maintain a diverse and competitive broadcasting landscape in the post-ASO period in relation to channel authorisation?

- 10 If DTT is to thrive, it is important that the licensing framework is enabling and predictable, provides regulatory certainty and stability, encourages investment, and provides room for growth.
- 11 The spectrum license should endure for the same period as the associated broadcasting service licence.
- 12 Pending any legislative amendments, the Authority must exercise its powers and perform its functions and duties in accordance with the licensing provisions in the ECA.
- 13 Currently the ECA provides for a 15 year licence term for individual broadcasting service licensees. MultiChoice believes this is an appropriate period to allow for long term investment in infrastructure and content production.
- 14 On the issue of incentive channels, MultiChoice submits that incentive channels were important for incentivising consumers in the dual illumination period to migrate away from analogue and take up the DTT service. In the post-ASO world, incentivising consumers to migrate is not the issue. In the post-ASO world, DTT broadcasters need to provide an attractive package of channels which caters to audience interests, in order to build a strong DTT platform. While the allocation of incentive channels is no longer important post dual-illumination, the new regulations must ensure that DTT broadcasters have the ability to offer new channels of interest to their audiences.

COVERAGE**QUESTION 12**

Do stakeholders believe there is a need for specific coverage targets in the DTT landscape post-ASO? (Yes/No)

What considerations or criteria do stakeholders propose for establishing and evaluating these coverage targets to ensure an effective and inclusive DTT environment?

QUESTION 44

In the context of digital broadcasting, what strategies can be employed to minimise delays in signal transmission, especially in rural areas, and ensure a seamless and uninterrupted viewing experience for the public?

- 15 In general, MultiChoice does not believe there is a need for specific coverage targets in the DTT landscape post-ASO. Licensees should be able to decide what DTT coverage targets make sense for them commercially and contract for such with their signal distributor. There is no sense in burdening licensees with large DTT coverage targets if the costs are economically unfeasible. This is especially so as the DTT services are also provided by satellite, so 100% of the population is able to access the services on a digital platform.
- 16 Notwithstanding the above, we acknowledge that where the SABC is concerned, it might make sense for there to be specific universal access obligations.
- 17 As regards delays in signal transmission, we are unsure what this question relates to. We are not aware of any features of DTT transmission which could cause delays and affect the viewing experience.

SIGNAL DISTRIBUTION**QUESTION 13**

Are there any foreseeable issues or concerns that should be considered regarding the appointment of a signal distributor to provide signals within a multiplex post-ASO?

QUESTION 46

What measures should be in place to ensure a smooth and efficient integration, especially when signals come from different broadcasters?

- 18 The appointment of a signal distributor during the dual illumination may have needed attention due to the fact that broadcasters were required to share multiplexes. Going forward, sufficient spectrum should be available under the 7 Multiplex Plan such that free-to-air and subscription broadcasters should not be obliged to share a multiplex. It is therefore unlikely that this will be such an issue in the post-ASO period and we therefore do not believe that the regulations will need to deal extensively with this issue.

- 19 On the issue of integration, MultiChoice does not believe any special measures in the regulations are required to provide for smooth and efficient integration in cases where signals come from different broadcasters. M-Net and e.tv were able to successfully share a multiplex during the dual illumination period without any regulatory intervention on integration being required.
- 20 However, there is a need for co-ordination between broadcasters and signal distributors on overall DTT transmission matters relating to transmission standards and Service Information (SI) that require common agreement for broadcasters to operate on the DTT platform and be interoperable on the free-to-air DTT receiver. Similarly, there is need for agreement on the South African MHEG profile (customised "look and feel") based on the basic MHEG standard. In the past, this work was dealt with by the DTT Rules of Operation Committee which operated on a self-regulatory basis. The DTT Rules of Operation committee, which was established in 2008 by the SABC, e.tv and M-Net, was intended to be an interim measure in the absence of any other bodies dealing with the critical issue of agreeing on the specific aspects of national and international standards that would be used for the launch of commercial DTT transmissions. The broadcasting signal distributors Sentech and Orbicom were also members of the committee. In 2014, the committee was joined by the members who represented community broadcasters.
- 21 A Rules of Operation Guide was completed and was made available by the committee to the Department of Communications, South African Bureau of Standards, signal distributors and manufacturers. It has guided the implementation of the DTT network for DTT Multiplex 1 and 2 by Sentech. However, there was a concern that as an industry self-regulatory initiative there was no regulatory requirement for any future licensees on DTT Multiplex 3 or any other future DTT Multiplexes, to join the committee or comply with the Rules of Operation Guide which could cause instability on the DTT platform in the long term. The matter was discussed at JSAG and it was proposed that the Authority consider a co-regulatory mechanism to make the Rules of Operation Guide binding on all DTT frequency spectrum licensees to ensure stability of the DTT platform.

22 The Memorandum of Understanding (MOU) between broadcasters and the Rules of Operation constitute an existing mechanism for ensuring the coordination required in s33(1) of the Electronic Communications Act, particularly in respect of transmission parameters. Accordingly, given that the Authority is required and empowered to make regulations regarding co-ordination in terms of s33(3) of the Act, it is within the Authority's regulatory mandate to make a regulation requiring that all terrestrial television broadcasting service licensees co-ordinate and secure commercial agreement on technical issues, transmission rules and procedures necessary for the operation of the DTT platform. Such regulation can include the requirement to become a signatory to the MOU and participate in the Rules of Operation Committee. If the Authority continues to keep JSAG in place going forward, such a committee could be established as a sub-committee of JSAG.

DATA SERVICES

QUESTION 14

How can "data services" be defined to mitigate regulatory uncertainty?

QUESTION 15

What specific services should be considered as "data services" within the context of the DTT?

QUESTION 16

Should the Authority continue to put a cap on data services? If not, what practical measurement will be deemed adequate by stakeholders?

QUESTION 17

How can the Regulations adapt to or leverage emerging technologies that may impact the provision and measurement of data services on DTT Multiplex?

23 The current Digital Migration Regulations prohibit licensees on DTT Multiplex 1 and Multiplex 2 from using more than 15% of assigned capacity for data services and radio channels.

24 MultiChoice understands that the policy rationale informing this 15% cap was to ensure that the primary use of the assigned capacity was for the provision of

television broadcasting channels and not electronic communication services or radio channels. However, from inception there was regulatory uncertainty as the Digital Migration Regulations did not define the concept of “data services” and hence there was a lack of clarity on what fell within or outside of the 15% cap. A further complication is that multiplexing is done on a dynamic basis making it difficult to measure the 15% cap. There was also no similar cap as provided for in the Diversity and Competition on Digital Terrestrial Television Regulations in respect of Multiplex 3.

- 25 This matter was discussed within JSAG. MultiChoice agrees with the JSAG view that the cap on data services is unduly prescriptive.
- 26 We support the JSAG recommendation that the regulations should merely provide for a predominance of television broadcasting channels on any capacity assigned to licensees, on any multiplex. This will simplify the monitoring of compliance by the Authority. With this approach it would also not be necessary to define data services.

ENGINEERING CHANNEL

QUESTION 18

What specific challenges have stakeholders encountered in the current implementation of the regulation regarding the engineering service channel?

QUESTION 19

How can the definition and scope of "engineering service" be clarified within the regulatory framework to alleviate uncertainties?

QUESTION 20

Should the engineering service channel be excluded from the calculation of allocated capacity for broadcasting service licensees on DTT Multiplexes? Please provide reasons for your proposal.

QUESTION 21

What do you propose as a fair and transparent method for allocating the required Mb/s for the engineering service within the broadcast transmission?

QUESTION 22

What are stakeholders' opinions on licensing the engineering service capacity to a common carrier on the Multiplex, designated by the Authority, to ensure transparency and non-discrimination?

QUESTION 23

How can such a licensing approach be structured to accommodate the interests of various stakeholders, including the common carrier and other potential service providers?

QUESTION 24

What factors should be considered when determining the optimal capacity for the engineering service in the evolving landscape of digital broadcasting?

- 27 The 2012 Digital Migration Regulations did not consider how the engineering service, which is required by broadcasters and manufacturers to be on the DTT platform for the download of software updates, would be implemented. An interim solution was implemented which resulted in 1 Mb/s being allocated on DTT Multiplex 1 for the engineering service by splitting the 1Mb/s proportionally (85%:15%) between the SABC and Community broadcaster allocated capacity on DTT Multiplex 1.
- 28 MultiChoice has participated in JSAG discussions on this issue and agrees with the JSAG recommendation that, going forward, the engineering service should not form part of the calculation of allocated capacity for broadcasting service licensees on DTT Multiplex 1 or any other Multiplex. We agree that the 1 MB/s should be allocated to the engineering service from the total MB/s of the broadcast transmission prior to the calculation of the licensed capacity for broadcasting services.
- 29 We also agree with the other related JSAG recommendations, including that:
- 29.1 In the interest of transparency and fair non-discriminatory operation, this engineering services capacity should be licensed to the common carrier on the Multiplex with the largest geographic coverage. (Although if another licensee on a different DTT Multiplex wishes to offer a similar service they would be free to do so).

29.2 In the post-ASO environment, consideration needs to be given to potentially increase the capacity assigned to the engineering channel to address the number of different STBs in the market that will require over the air software downloads.

30 We submit that the Authority should consider the JSAG proposals in the context of this review.

DIGITAL COMMITTEES

QUESTION 25

How effectively has JSAG facilitated the coordination of frequency spectrum usage and management of interference during the Digital Migration Performance Period as outlined in Regulation 13?

QUESTION 26

Are there specific challenges or successes experienced in spectrum coordination that stakeholders would like to highlight?

QUESTION 27

Is there a role that the JSAG should continue to play in the post-ASO era to ensure ongoing effective coordination of frequency spectrum usage for DTT?

QUESTION 28

How can JSAG evolve to address emerging challenges or opportunities in spectrum management beyond the ASO phase?

QUESTION 29

To what extent has the DTCAG influenced the supply of digital television content as per its advisory role outlined in the 2012 Regulations?

QUESTION 31

Do stakeholders perceive a continuing need for advisory groups like JSAG and DTCAG in the post-ASO landscape? Why or why not?

QUESTION 32

What specific functions or roles should such advisory groups undertake to support the evolving needs of DTT stakeholders?

QUESTION 34

What functions or responsibilities could these potential new bodies fulfil to enhance the efficiency of DTT operations?

QUESTION 33

Are there identified gaps or challenges in the current regulatory framework that may necessitate the establishment of new advisory or coordination bodies post-ASO?

- 31 The Digital Migration Regulations provide that JSAG²⁶ will be dissolved within six months after the end of the dual illumination period.²⁷ We are of the view that JSAG still has an important role to play. MultiChoice submits that JSAG has played an effective role in bringing the Authority and stakeholders together to discuss matters related to DTT spectrum usage during the dual illumination period. We think there is value in its continued operation during the post-ASO period, particularly as the 7 Multiplex Plan is reviewed and optimised. We therefore recommend that the Authority provide for the continued existence of the JSAG to coordinate, assist and advise on spectrum coordination post-ASO
- 32 As far as DTCAG is concerned, although the committee met from time to time and enjoyed participation from broadcasters and producers, we do not believe it influenced the supply of digital television content during dual illumination. This is because, prior to the formation of the committee, there was already a very well established production sector in South Africa. Therefore the commissioning of content for new digital channels did not require any specific interventions. For this reason, we do not believe there is a pressing need for the continued existence of DTCAG in the post-ASO environment.
- 33 We do not believe there is a need for any other potential advisory committees.

²⁶ In terms of the Digital Migration Regulations, the Authority established the JSAG, as a consultative forum, with the terrestrial television broadcasting service licensees and broadcasting signal distribution licensees to co-ordinate usage of radio frequencies during digital migration, to advise the Authority and to make recommendations on the most efficient processes to be adopted in resolving matters related to spectrum management (Regs. 13(1) and (2) of the Digital Migration Regulations). The JSAG comprises, amongst others, two representatives from each terrestrial television broadcasting service licensee

²⁷ Reg. 13(4) of the Digital Migration Regulations

AUDIENCES / END USER EQUIPMENT

QUESTION 30

Are there notable successes or challenges in encouraging end-users to acquire set-top boxes and initiating digital television service consumption?

QUESTION 42

Are there individuals that may face challenges in adopting DTT and how can these challenges be addressed?

QUESTION 43

How can DTT services be made more accessible and inclusive for diverse user groups, including those in rural areas or with limited technological access?

QUESTION 45

How can stakeholders collaborate to address challenges related to upgrading existing analogue transmission towers for digital signals and what measures can be taken to assist consumers in obtaining and installing new antennas for digital transmissions?

QUESTION 48

How has the adoption of STBs facilitated the reception of DTT services on existing television sets, especially in terms of accessibility and affordability for consumers, particularly those in poor households?

- 34 Set top boxes were always intended as a temporary measure until old analogue television sets are phased out and gradually replaced by television sets which have an integrated digital tuner (that is a built in receiver which enables the digital signals to be viewed on the television). Most of the over one million television sets sold in South Africa per annum are already digital ready.
- 35 In addition, the Government has decided, as a matter of policy, to consider finding the means to make set top boxes affordable and available to the poorest TV-owning households as part of its commitment to bridging the digital divide in South Africa. The Government subsidy established by the BDM Policy is a means to enable the poorest TV households to adopt digital technology to continue to view the existing television channels.
- 36 While we appreciate the Authority's wish to understand audience/end-user issues, the stated purpose of this Inquiry is to shape the regulatory framework

necessary for the successful execution of digital terrestrial television post the migration.

37 Insofar as the Authority's role is concerned, we urge the Authority to adopt a forward-looking approach and put in place an enabling framework for digital terrestrial broadcasting post-ASO which ensures that sufficient spectrum is available for broadcasting services now and in the future (including for new technologies such as 5G, broadcasting adjacent technologies such as PMSE, and room for the future growth of digital broadcasting).

38 This will create the conditions necessary for broadcasters to invest in DTT and to provide compelling and interesting content which attracts viewers to the DTT platform.

TRANSMISSION STANDARDS

QUESTION 35

How has the implementation of this DVBT-2 contributed to enhancing capacity, ruggedness and flexibility?

QUESTION 36

How are broadcasters and broadcast signal distributors taking advantage of Internet Protocol connectivity and wireless networks?

QUESTION 37

How does the introduction of DTT complement or differentiate itself in comparison to alternative delivery methods and what advantages does it offer?

QUESTION 38

In the context of next-generation DTTB systems, what are the anticipated enhancements in application-oriented technologies?

How can these advancements contribute to delivering superior services while addressing the challenge of information expansion through the convergence of the Internet and broadcasting?

39 Regulatory certainty and predictability are critical. The unnecessary debates around the DVB-T transmission standard in 2010 derailed digital migration. The

DVB-T standard is working well and we urge the Authority not to tinker with the established DVB-T standard.

- 40 Mobile television broadcasting using the DVB-H standard has not succeeded in South Africa or elsewhere, with mobile television broadcasting transmissions having ended in South Africa in 2018. We urge the Authority to consider whether it is still necessary to have an allocation for mobile television broadcasting using the DVB-H technology.
- 41 There are, however, exciting new technologies, such as 5G broadcasting, which are being trialled internationally. Although the 5G broadcasting system is still very immature, we encourage the Authority to allow for the introduction of next generation DTTB systems and future growth and innovation.

5G

QUESTION 39

What advantages do 5G technologies offer in terms of reducing barriers for live broadcasts and how can these technologies benefit remote production by traditional television broadcasters, potentially creating additional revenue streams?

QUESTION 40

Considering the active progress in implementing 5G networks by network providers, how might the introduction of the fifth generation of wireless networks reshape the landscape of content consumption, particularly beyond the scope of DVBT-2?

QUESTION 41

How do 4G and 5G technologies contribute to the broadcast, multicast, and unicast of UHD television and what transformations can be expected in the television industry with the evolution towards XR and AR applications?

- 42 Although mobile television using the DVB-H standard was not successful, experts still see a place on DTT for some form of mobile or out-of-home consumption of linear and/or non-linear content provided by broadcasters.
- 43 This need could be addressed by 5G Broadcast, which allows for delivery of content to large numbers of concurrent users on mobile devices, without taking up cellular bandwidth by using an existing DTT transmitter network. In addition

to broadcast and pop-up video services, the standard also allows for multicast data delivery to Internet of Things (IoT) applications, thereby creating opportunities for introducing new services in the broadcasting bands on the DTT platform.

- 44 MultiChoice submits that the Authority must ensure that space is left to accommodate new services such as 5G Broadcast, as well as trial new services and provide special events broadcasts.

FUTURE SPECTRUM ALLOCATION

QUESTION 47

Stakeholders are requested to comment on the repurposing of a portion of the digital spectrum for alternative uses, including for mobile broadband services post-ASO.

- 45 As we have stated in our main submission and in the section on multiplex allocation above, we believe it is critical that the Authority maintain sufficient spectrum for broadcasting services now and in the future.
- 46 There should therefore be no further digital dividend spectrum allocated for IMT use in the television bands. These bands should be permanently allocated for broadcasting and creative/cultural use. In time it is anticipated there will be further pressure on the DTT Multiplexes to accommodate improved picture quality beyond HD and as more 4k content and 4k television sets become available. This will put pressure on the number of television and audio channels that can be supplied on DTT multiplexes.
- 47 It is critical that radio frequency planning for DTT be focused not only on short term licensing but also the long term future needs of the sector. Radio frequency in the terrestrial broadcasting radio frequency band should be reserved for nascent technology such as 5G, as well as trials, special events and PMSE.
- 48 Sufficient spectrum must be safeguarded for future use by broadcasting and broadcasting-adjacent technology and services. For instance, space in the terrestrial broadcasting frequency bands also needs to be retained for television production that requires transmission capacity for wireless production equipment

(PMSE). Wireless production technology is not only used by broadcasters but is a critical aspect of creative and cultural industries for use at concerts, theatres and special events. There is no alternative spectrum that meets the use case and can provide the required transmission capacity.

REGULATIONS

QUESTION 49

In understanding the costs of the transition to digital broadcasting and its implications for various stakeholders post-ASO, what key factors should the Authority consider when developing post-ASO regulations?

QUESTION 50

What timeline would be appropriate for the imposition of new regulations governing DTT post-ASO and what factors should be considered in determining this timeline?

QUESTION 51

What should be the overarching purpose of the revised regulations in the post-digital migration environment?

QUESTION 52

How can the new regulatory purpose best support the evolving needs and dynamics of the digital broadcasting landscape?

49 As we have stated in our main written submission, much of the current DTT regulatory framework was only ever intended to be transitional in nature, given the phased shift to digital broadcasting. It was always envisaged that these arrangements would be revisited at the time of ASO.

50 Due to various factors which we deal with in our main submission, the existing regulatory approach on DTT did not set up the platform for success. It is therefore important that the next set of regulations provide a sound foundation for DTT going forward. DTT should be given the best regulatory chance to succeed in South Africa as it has succeeded in many other places around the world.

51 We therefore support the Authority's initiative to conduct an inquiry to determine what regulatory framework the Authority should formulate for digital television

broadcasting, with a view to shaping the regulatory framework necessary for the successful execution of digital terrestrial television post the migration.

- 52 To achieve success, we think it is important that this review is not overly narrow. The review cannot be confined only to an assessment of the 2012 Regulations. There are other regulations directly relevant to DTT which cannot be overlooked in this review.
- 53 The review should also not focus on evaluating the efficacy of past decisions which were made for the period of dual illumination. The end of dual illumination in December 2024 is approaching and the regulatory regime which has existed for dual illumination over the last several years is not actually that relevant any longer. It is far more important that we look forward and that a new, enabling framework be put in place. In our view, those enabling regulations should be light touch and market driven. They should provide stability, encourage investment, and ensure a diverse range of services for audiences.
- 54 The review must also take into account that sufficient spectrum for DTT services is a vital precursor for success. Because the digital dividend has already been released for IMT services and dual illumination is due to end soon, presumably the full batch of spectrum earmarked for DTT in the 7 Multiplex plan can now become a reality. This will hopefully allow DTT operators to build commercially viable DTT bouquets, including HD channels. The mechanics of how this spectrum will be allocated and licensed is one of the key issues that must be addressed in this inquiry. It may be necessary for instance, for the allocated spectrum to be replanned to allow for local and provincial multiplexes.
- 55 It is also important to note that DTT exists within a broader audio-visual environment, which is currently undergoing rapid change. As the final White Paper and future legislative changes cannot be pre-empted, this review must necessarily take place within the confines of existing legislation. But ultimately, if DTT is to fully succeed, the draft White Paper proposals on regulatory parity need to be urgently brought in to allow broadcasting services, including DTT services, to operate on a more even footing with the new OTT competitors.

- 56 We suggest the Inquiry should be focused on the following-
- 56.1 developing the optimal regulatory approach to facilitate the future success of the platform;
 - 56.2 providing for the licensing of the spectrum allocated to broadcasting services in terms of the 7 Multiplex plan (and where necessary optimising this plan to cater for local, provincial and national services);
and
 - 56.3 creating an enabling regulatory environment that provides regulatory certainty and stability, encourages investment, and which is not overly complicated, thus allowing the existing terrestrial broadcasters and new entrants to provide innovative and exciting content to viewers.