INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA

NOTICE 986 OF 2022

DISCUSSION DOCUMENT ON THE MARKET INQUIRY INTO SIGNAL DISTRIBUTION SERVICES IN SOUTH AFRICA

INVITATION FOR WRITTEN REPRESENTATIONS ON THE DISCUSSION DOCUMENT ON SIGNAL DISTRIBUTION SERVICES

1. On 17 September 2021, the Independent Communications Authority of South Africa ("the Authority") published a notice in the *Gazette*[1] indicating its intention to conduct an Inquiry ("the Inquiry") into signal distribution services in terms of section 4B(1)(a) of the Independent Communications Authority of South Africa Act, 2000 (Act No. 13 of 2000) ("ICASA Act").

2. The purpose of the Inquiry is to assess the state of competition and determine whether or not there are markets or market segments within the signal distribution services value chain which may warrant regulation in the context of a market review in terms of section 67(4) of the Electronic Communications Act, 2005 (Act No. 36 of 2005).

3. The Inquiry is being conducted in four Phases (i.e. Phase I – Market inquiry, Phase II - Discussion Document, Phase III – Public Hearings on the Discussion Document, and Phase IV – Findings Document)[2].

4. On 17 September 2021 and as part of Phase I, the Authority published a questionnaire on its website requesting information and opinions from stakeholders (including the general public) to inform its market study.

5. The Authority received responses to Phase I (Market Study) from Radio Pulpit/ Radiokansel and the SABC on 02 and 18 November 2021 respectively.

[1] Government *Gazette* No 45172 in Notice No 873

[2] Ibid at para. 4

6. On 14 January 2022, the Authority sent a letter to Sentech to submit all the information requested by the Authority in terms of the questionnaire within seven (7) days of receipt of the letter. The letter was sent to Sentech after the submission deadline of 23 November 2021 given Sentech's significance in the signal distribution services markets in South Africa.

7. On 01 February 2022, the Authority received responses to Phase I (Market Study) from Sentech.

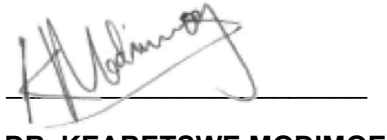
8. The Authority now invites stakeholders to make written representations on the Discussion Document in line with Phase II of the Inquiry. The written representations should reach the Authority within forty-five (45) working days from the date of the publication of this Discussion Document by email at signaldistribution@icasa.org.za.The Authority will not consider written representations received after the aforementioned closing date (i.e. 45 working days).

9. Written representations should be as detailed as possible and views or opinions expressed should be substantiated, as far as possible, by evidence, studies conducted by stakeholders, stakeholders' own data, international experience or precedence.

10. Stakeholders may request that specific information of the written representations be treated as confidential as envisaged in section 4D of the Indepenent Communications Authority of South Africa Act, 2000 (Act No. 13 of 2000) ("ICASA Act"). In adhering to the provisions of section 4D (1) (b) and (4) of the ICASA Act, stakeholders must not simply indicate that the information, for example, is financial, commercial or technical, but should provide a detailed explanation(s) of how such information is likely to cause harm to their commercial or financial interest if it were to be in the public domain. A confidential and non-confidential version of the written representation **must** be submitted with the request for confidentiality.

11. Stakeholders must indicate whether they require an opportunity to make oral representations at public hearings, which may be held in due course.

12. All communication relating to this Inquiry must be directed to the Chairperson: Signal Distribution Council Committee by email at signaldistribution@icasa.org.za



DR. KEABETSWE MODIMOENG
CHAIRPERSON
DATE: 31/03/2022

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1 Introduction

1.1. The purpose of this Inquiry is to assess the state of competition in the provision of signal distribution services in South Africa and determine whether or not there are markets or market segments within the signal distribution services value chain which may warrant regulation in terms of section 67(4) of the Electronic Communications Act, 2005 (Act No. 36 of 2005) ("ECA").

1.2. In order to carry-out the above Inquiry, the Authority solicited information and views from stakeholders in order to assess the state of competition in the signal distribution services markets.

1.3. The Discussion Document is structured in terms of the following sections:

1.3.1. Chapter 2 – Approach used.

1.3.2. Chapter 3 – Broadcasting transmission services market in South Africa.

1.3.3. Chapter 4 - The relationship between retail and wholesale broadcasting markets.

1.3.4. Chapter 5 – The relevant retail markets.

1.3.5. Chapter 6 – The relevant wholesale markets.

1.3.6. Chapter 7 – The evaluation of effectiveness of competition.

1.3.7. Chapter 8 – Significant market power.

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2 Approach used

This section outlines the approach used by the Authority to: (1) identify and define relevant markets in the provision of signal distribution services, (2) determine the effectiveness of competition in the relevant markets, (3) determine licensees with significant market power, and (4) identify suitable pro-competetive remedies where competition is found to be ineffective.

2.1 Market definition

2.1.1 Section 67(4)(a) of the ECA requires that:

> *"The Authority must, following an inquiry, prescribe regulations defining the relevant markets and market segments and impose appropriate and sufficient pro-competitive licence conditions on licensees where there is ineffective competition, and if any licensee has significant market power in such markets or market segments. The regulations must, among other things:*
>
> *(a) define relevant wholesale and retail markets or market segments…"*

2.1.2 The Authority followed section 3.2 of a Guideline for Conducting Market Reviews ("Market review guidelines")[3] when defining the relevant markets.

2.1.3 The market definition exercise is not an end in itself, but, a means to assessing whether end-users of a product are protected by effective competition and thus whether there is a requirement for the imposition of ex ante regulation.

[3] Issued on 8 March 2010.

2.1.4 There are two dimensions to the definition of a relevant market: the relevant products to be included in the same market and the geographic extent of the market.

2.1.5 The relevant product market is a grouping of products and or services that are interchangeable or substitutable. Where a prduct and or service has close substitutes, it is expected that the firm concerned will be constrained from exercising market power in the relevant market.

2.1.6 To test substituability of products or services, the Authority considered both demand-side and supply-side factors. The former is concerned about the extent to which it is possible for a customer to substitute other services for those in question in response to a relative price increase. The latter is about the extent to which suppliers can switch, or increase, production to supply the relevant products or services in response to a relative price increase

2.1.7 The Authority used the hypothetical monopolist test (“HM test”) in order to identify close demand-side and supply-side substitutes.

2.1.8 In terms of HM test, a product or service is considered to constitute a separate market if the hypothetical monopolist supplier could impose a small but significant non-transitory increase in price (“SSNIP”) above the competitive level (i.e., between 5 and 10%) without losing sales to such a degree as to make this price rise unprofitable. If such a price rise would be unprofitable, because consumers would switch to other products or because suppliers of other products would begin to compete with the hypothetical monopolist, then the market definition should be expanded to include the substitute products.

2.1.9 Supply-side substitution possibilities is assessed to consider whether they provide any additional constraints on the pricing behaviour of the hypothetical monopolist which have not been captured in the demand-side analysis. For supply side substitution to be relevant, there would need to be additional competitive constraints arising from entry into the supply of the service in question, from suppliers who are able to enter in a relatively short period of time and at low cost, by virtue of their existing position in the supply of other services.

2.1.10 Another factor that was considered by the Authority is whether there exist common pricing constraints across customers, services or geographic areas. Where common pricing constraints exist, the products or geographic areas in which they apply could be included within the same relevant market even if demand-side and supply-side substitutes are not present. Failure to consider the existence of a common pricing constraint could lead to unduly narrow markets being defined.

2.1.11 In addition to product market definition and or common pricing constraints, the Authority is required to specify the geographic extent of the market within which conditions of competition are sufficiently similar. One approach is to start with a narrowly-defined area and then consider whether a price increase by a hypothetical monopolist in that narrowly defined area would encourage customers to switch to suppliers located outside the area (demand-side substitution) or providers outside the area to begin to offer services in the area (supply-side substitution). If demand and/or supply side substitution is sufficient to constrain prices then it is appropriate to expand the geographic market boundary. An alternative approach is to define geographic markets in a broader sense. This involves defining a single geographic market but recognising that this single market has local geographical characteristics.

Question 1: In your opinion, is the above approach to market definition by the Authority appropriate in defining the relevant markets? Motivate your response by providing reasons and any supporting evidence or data, as far as possible.

2.2 Effectiveness of competition (including entry barriers, market shares and significant market power)

2.2.1 The Authority is required, in terms of section 67(4)(b) of the ECA, when prescribing regulations and after defining relevant market, to:

"(b) determine whether there is effective competition in those relevant markets and market segments...".

2.2.2 The Authority is required to consider the factors outlined in section 67(4)(b) of the ECA and section 3.3 of the Market Review Guidelines when evaluating the effectiveness of competition in the signal distribution services markets on a forward-looking basis

2.2.3 The factors considered include, among others, the following:

2.2.3.1 Assessment of relative market shares.

2.2.3.2 Actual and existence of competitors.

2.2.3.3 Barriers to entry and expansion.

2.2.3.4 The level, trends in concerntration and history of collusion in the market.

2.2.3.5 Control of essential facilities.

2.2.3.6 Technological advantages or superiority.

2.2.3.7 Countervailing bargaining power.

2.2.3.8 Easy or privileged access to capital markets and financial resources.

2.2.3.9 Economies of scale and scope.

Question 2: Do you agree with the Authority's approach regarding the evaluation of effective competition? If not, motivate your response by providing comprehensive reasoning thereof.

2.3 Significant Market Power

2.3.1 The Authority's determination whether any specific licensee hold significant market power is based on the outcome of market definition and the evelation of the effectiveness of competition.

2.3.2 The Authority is required in terms of section 67(5) of the ECA to determine "*A licensee has significant market power in a market or market segment if that licensee –*

(a) is dominant;

(b) has control of an essential facility; or

(c) has a vertical relationship that the Authority determines could harm competition."

2.4 Remedies

2.4.1 The Authority is required in terms of section 67(4)(d) of the ECA to:

> *"(d) impose appropriate pro-competitive licence conditions on those licensees having significant market power to remedy the market failure"*

2.4.2 Section 67(7) of the ECA prescribes that the Authority should consider the following list of pro-competitive remedies:

"Pro-competitive licence terms and conditions may include but are not limited to—

(a) obligations in respect of interconnection and facilities leasing in addition to those provided for in Chapters 7 and 8 and any regulations made in terms thereof;

(b) penalties for failure to abide by the pro-competitive licence conditions;

(c) obligations to publish any information specified by the Authority in the manner specified by it;

(d) obligations to maintain separate accounting for any services specified by the Authority;

(e) obligations to maintain structural separation for the provision of any services specified by the Authority;

(f) rate regulation for the provision of specified services, including without limitation price controls on wholesale and retail rates as determined by the Authority, and matters relating to the recovery of costs;

(g) obligations relating to accounts, records and other documents to be kept, provided to the Authority, and published…"

3 Broadcasting transmission services market in South Africa

3.1 Introduction

3.1.1 In this section, the Broadcasting Transmission Services Market will be discussed broadly and the terminology for the market analysis explained. Throughout the document broadcasting transmission services will be used as a general term to describe the following services:

- UHF and VHF analogue television transmission (SABC 1 – 3; e.tv, M-Net and Community TV);
- FM radio transmission (Public, Commercial and Community radio);
- AM radio transmission;
- Satellite television transmission (DSTV, StarSat, OVHD and DTH);
- Digital Terrestrial Televsion (DTT) transmission (MUX 1 – 3);
- Digital Sound Broadcasting (DAB+, DRM30 and DRM+);
- Transmission between production sites (Contribution);
- Transmission for feeding signals to transmitter station(s);
- Transmission for relaying signals between main transmitters (including Single Frequency Network); and
- Transmission for distribution to end users (access network)

3.1.2 The schemetic infrastructure of the broadcasting network is presented in Figure 1 (next page)

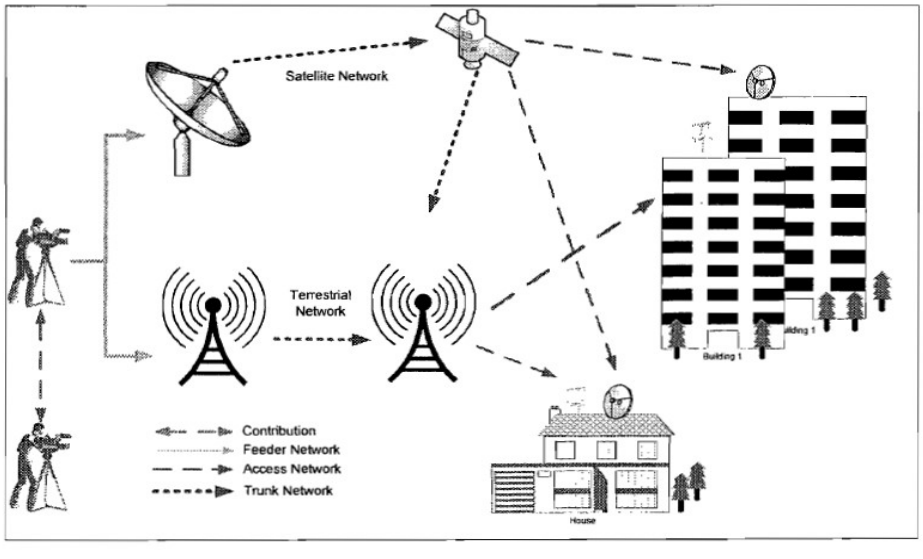

Figure 1: Schematic Presentation of the Infrstructure for Broadcasting Transmission in South Africa.

3.1.3 The contribution network is the part of the network where broadcast content is carried e.g. between recording/production sites and studio.

3.1.4 The feeder network is the portion of the network that runs from the broadcaster out to the first point of connection in a transmitter network or trunk network (terrestrial antenna or satellite earth station). Feeder networks can be developed using various technologies such as fibre or radio relay links.

3.1.5 The trunk network is the portion of the network where broadcast signals are carried between the first point of connection with the broadcaster up to the interface with the access network.

3.1.6 The access network is the last portion of the network and is used to distribute broadcast signals to the end user. In a broadcasting context, such networks are usually called signal distribution networks. In South Africa, broadcasting content can be distributed either using the terrestrial network or by satellite.

3.1.7 Technological developments have meant that other technologies may increasingly be used for broadcasting in the future (like OTT services). On the feeder, trunk and contribution networks, the Authority understands that the infrastructure used to deliver broadcasting transmission services can be used both for transmission of broadcasting services and for telecommunications.

3.1.8 The Authority understands that there are a range of providers in the market currently providing broadcasting transmission conveyance (e.g. point to point transmission

services on feeder, trunk and contribution networks). It is the Authority's initial view that any consideration of these services in terms of market definition would need to consider the broader range of providers that provide similar types of transmission services in the telecommunications market. In many other countries, these 'leased line' transmission services (which can be provided at both the retail and wholesale level) have been considered as part of a broader market (including both transmission services used by broadcasters and fixed and mobile telecommunication service providers). The Authority considers that it is beyond the scope of this review to consider the market for leased lines. This market may be subject to a separate market review by the Authority in terms of section 4B of the ICASA Act and/or as part of future Chapter 10 review under the ECA.

3.1.9 As discussed in the introductory section, the focus of this review is on broadcasting transmission services, which the Authority defines as the transmission of content to end-users once the content has been delivered to the Access or Signal Distribution network. For terrestrial networks the access network begins at the transmission site or mast. For satellite networks, the Authority considers that the access network begins from the satellite ground station. The different types of broadcasting transmission will be discussed in greater detail below.

3.1.10 Transmission equipment is used as a generic term to describe all of the equipment (other than masts) which is used by signal distributors to transmit the broadcast signal (i.e. transmitter, combining unit, feeder and antenna) received via the signal distribution network.

3.1.11 As explained above, the conveyance of broadcasting content from studios to transmission masts (i.e. "point-to-poinf"' transmission or "linking") forms part of broadcasting transmission. This "conveyance" service will be discussed briefly in this Discussion Paper but it is not intended to be a key focus of the review.

3.2 Digital Switchover and Re-negotiation of Wholesale Broadcasting Transmission Agreements

3.2.1 The migration from analogue to digital broadcasting will have far reaching implications on the broadcasting industry. The Minister of Department of Communications and Digital Technologies (DCDT) had initially announced the TV analogue switch-off as 31 March 2022[4]. However, the analogue switch-off date was deferred by three months from 31 March 2022 to 30 June 2022 by the North Gauteng High Court (Pretoria).[5]

3.2.2 In 2006 South Africa signed the ITU RRC'06 Agreement confirming its decision to use Digital Video Broadcasting Terrestrial (DVB-T) as its national digital terrestrial television standard. The government published a Policy Determination on Digital Migration[6] which was later changed to DVB-T2 on 14 January 2011 by the Communications Minister.

3.2.3 The multi-channel environment, for which digital broadcasting allows, has raised questions regarding the appropriate role to be played by the entities which provide signal distribution services to the broadcasters. It is likely in the future, to become difficult to allow broadcasting service licensees operating on the DTT platform to enter into their own commercial arrangements with ECNS licensees who provide signal distribution services. This is because a single multiplex, which must be

[4] Announcement Of Date For Final Switch-Off Of The Analogue Signal And The End Of Dual Illumination, Gazette No. 45984, February 2022

[5] Case No.: 51159/2021

[6] Broadcasting Digital Migration Policy for South Africa August 2008 *Gazette* 31408.

transmitted by a single provider of signal distribution services, may be allocated to two or more different broadcasting service licensees.

3.3 Relevant licensees

3.3.1 A broadcaster wishing to deliver broadcast content to end users in South Africa may obtain such transmission services from a limited number of providers and across a limited number of technology platforms. The choice of provider is based on a number of factors, including:

- Coverage and penetration;
- Technical aspects, including the degree of digitisation and quality of service;
- Capacity availability and limitations;
- Regulatory requirements and restrictions; and
- Cost differentials and revenue impact of acquiring transmission over different platforms.

3.3.2 In South Africa there are two major technology platforms for the delivery of broadcasting content; namely terrestrial (analogue and digital) and satellite. Subscription broadcasters are obliged under certain circumstances to carry the public broadcaster's channels at no cost to the public broadcaster licensee in terms of the Must Carry regulations. In addition, licence obligations, such as the requirement to broadcast to a certain specific proportion of the population,may have the effect of forcing broadcasters to use a particular technology platform to broadcast content to end-users (i.e. viewers and listeners).

3.4 The broadcasting market

3.4.1 The broadcasting market consists of the following main categories of operators:

- **Content producers**, such as movie studios and television and radio production
- companies;
- **Broadcasters** (including SABC, MultiChoice and e.tv) ;
- **Providers of transmission capacity** (e.g. Orbicom and Sentech);
- **Distributors** (companies that distribute broadcast programming by subscription agreements out to viewers, such as StarSat on satellite networks); and
- **End users** (viewers and listeners).

3.4.2 The relationship among the various operators can be briefly explained as follows: Broadcasters' programming consists of content produced in-house as well as content purchased from other content producers. To get content distributed out to end users, broadcasters have to contract directly with providers of broadcasting transmission services (e.g. Sentech) or with a distributor of broadcast content (such as DSTV or StarSat). Depending on the type of broadcaster, funding can come from TV licence fees, customer subscriptions, advertising or through direct government funding.

3.5 Types of Wholesale Broadcasting Transmission Networks

Today in South Africa the majority of end users receive radio and television via terrestrial networks or by satellite. The Authority notes that there are some end-users to access broadcasting content over alternative delivery platforms such as using broadband connections (such as streaming services or OTT) and using existing mobile networks. However, the Authority's view is that these alternative technology platforms are not considered as signal distribution.

3.6 Wholesale Broadcasting Transmission on Terrestrial Networks

3.6.1 A key input required for radio and television broadcasting transmission is the network of antennae support structures ('masts') at specific locations ('sites'). Masts may be located on sites that have been purchased by the terrestrial network operator for broadcasting transmission services and are owned outright by them. Masts may also be installed on sites that are leased from a freeholder (such as a farmer) who receives revenue for allowing installation and access. Finally, masts (or small antennae structures) may be installed by the terrestrial network operator on infrastructure owned by other organisations such as fixed or mobile communication operators, rooftops of tall buildings or different types of structures that provide the required height. In South Africa Sentech is the main provider of wholesale broadcasting transmission on terrestrial networks. The Authority understands that Orbicom has a network of terrestrial transmission sites but only provides transmission services to MNet and Multichoice (both Orbicom and MNet are wholly owned subsidiaries of MultiChoice). As such, the great majority of masts suitable for national television and radio broadcasting transmission are controlled by Sentech.

3.6.2 The Authority understand that DTT network has fully been deployed and that analogue television broadcasting was expected to be switched-off on 31 March 2022 as part of the digital migration process. [7,8] The Minister of Communications and Digital Technologies, initially determined the 31st of March 2022 as the date for the final switch-off of the analogue signal.[9] The switch-off date was, however, extended by three months from 31 March 2022 to 30 June 2022 by the North

[7] http://cispub.sentech.co.za/

[8] https://www.icasa.org.za/news/2022/icasa-notes-the-deadline-for-analogue-switch-off

[9] Broadcasting Digital Migration Policy (as amended): Announcement of date for final switch-off of the analogue signal and the end of dual illumination.

Gauteng High Court (Pretoria). The Pretoria High Court's ruling was in terms of 172(1)(b) of the Constitution and aligns with the Authority's determination on the expiry of the provisional spectrum licence period, as stated by the Authority in its media statement of Monday, 28 March 2022, which is aimed at ensuring the seamless transition of services by 1 July 2022.[10] The full judgment will be available once it has been reported by the Court.

Both analogue and digital terrestrial transmission have similarities in respect to some of the inputs used (e.g. masts, maintenance) and may have common end-users (viewers and listeners). However, they differ in certain respects, including the power of transmission level used, the transmission equipment used, capacity (digital transmission can carry significantly more content than analogue) and end-users. As digital television is rolled out nationally, end-users that wish to view and listen to digital content would need to invest in new receiving equipment and may need aerial adjustments to receive digital signals.

3.6.3 Broadcasters are the immediate customers for terrestrial and satellite transmission. As a condition of their broadcasting licence, some television and radio broadcasters have national coverage requirements (e.g. SABC and MNet have licence obligations to provide national coverage for their broadcasting services while e.tv is required to cover a minimum of 77% of the population). Television and sound broadcasters with licence obligations regarding population coverage have no alternative but to obtain broadcast transmission services over national signal distributors.

3.6.4 The service that Sentech, as the only provider of a national terrestrial network, provides is termed a Managed Transmission Service (MTS) since it represents an

[10] https://www.icasa.org.za/news/2022/icasa-welcomes-court-judgement-and-order-on-the-e-tv-digital-migration-case-pleads-with-telkom

end-to-end service including the installation and operation of the broadcasting equipment, the management of broadcast quality and maintenance of the equipment. Customers accordingly have a single entity to deal with for all transmission requirements.There are also Radio Frequency Spectrum Regulations of 2015[11] in place in order to effectively manage broadcasting spectrum interference.

3.7 The value chain for terrestrial broadcasting transmission

3.7.1 The retail market of broadcasting is comprised of end-users (views and listeners). The wholesale market is comprised of suppliers[12] and consumers of MTS. This applies for both radio and TV, though in some cases, radio broadcasters self-provide broadcasting transmission as an alternative to purchasing MTS from the owner of the terrestrial broadcasting network (like Sentech).

3.7.2 For terrestrial broadcasting, the MTS supplier takes responsibility for a broadcast stream arriving at a transmission site and makes arrangements necessary for it to be transmitted from an antenna at that site, monitoring and assuring quality of the transmitted signal and making arrangements for the maintenance of the transmission equipment. The MTS supplier also operates the transmission site, which involves the provision of space to establish a building, or maintenance of buildings, facilitation of power etc. Broadcasting transmission is often effected using equipment, in particular a combiner, feeder and a shared antenna which is shared between several analogue broadcast channels or digital multiplexes, in the case of

[11] Government *Gazette* No. 38641.

[12] Sentech, Orbicom and some community broadcasters who self-provide MTS services.

digital broadcasting. The MTS provider is responsible for the installation, operation and maintenance of such equipment.

3.7.3 For satellite broadcasting, the MTS supplier takes responsibility for a broadcast stream when it reaches the access network (the satellite ground station), which is then transmitted to satellites and distributed to end-users that have the necessary equipment to receive such signals.

3.7.4 Sentech provides most if not all MTS to all national radio and TV broadcasters as well as significant number of community radio and regional TV and radio broadcasters. Some community radio broadcasters self-provide all or some of their transmission requirements. The Authority understands that some broadcasters purchase elements of their transmission requirements from suppliers other than Sentech.

3.7.5 Although in principle, many of the elements of a MTS may be obtained separately, the Authority understands that, in practice, most terrestrial television broadcasters and most terrestrial radio broadcasters in South Africa purchase MTS from Sentech.

3.8 The wholesale broadcasting transmission needs of different types of broadcasters

3.8.1 Broadcasting transmission requirements may differ according to geographical area of the licence, the audience size and the terrain. The larger the geographic area, the bigger the audience and the more undulating the terrain the more likely are broadcasters to require transmission from tall purpose-built transmission masts. This is due to the need to propagate the broadcast signal over a wide area or because of a signal transmitted from a low vantage point would be poor in an urban

environment. They are also likely to need high power transmissions in order to reach their target audience. This requires a specialised workforce to handle this equipment and power levels. These broadcasters may also need to broadcast from more than one location (for a national licensee, this may require a large network of sites). To provide this transmission and its ongoing maintenance, a broadcaster may prefer to contract with one firm, for both convenience and for consistency of quality. These broadcasters may also have greater start-up and ongoing costs when compared to smaller broadcasters. The basic equipment is likely to be expensive and sophisticated, its installation may be more specialised, the power needs are higher and the equipment itself may need more frequent replacement and maintenance due to the stress of high power use.

3.8.2 Broadcasters who have a larger geographic footprint are likely to require purpose-built transmission sites compared to those licensees with smaller geographic footprints, which may be able to install transmission equipment on sites that are not necessarily purpose built to provide broadcasting transmission services.

3.9 Broadcasting Transmission on Satellite Networks

3.9.1 Satellite broadcasting transmission commences at a transmitting antenna located at an uplink facility or ground station which may not necessarily be located in the same country as the audience for the broadcast. Uplink satellite dishes are very large, as much as 9 to 12 meters in diameter, to provide aiming accuracy and increased signal strength at the satellite. The uplink dish is targeted at a specific satellite and the up-linked signals are transmitted within a specific frequency range to the appropriately tuned transponder aboard that satellite. The transponder 'retransmits' the signals back across the satellite's 'footprint' (downlink) but at a different frequency band (a process known as translation, used to avoid interference

with the uplink signal), typically in the C-band (4-8 GHz) or Ku-band (12-18 GHz) or both.

3.9.2 The down linked satellite signal, is typically collected by satellite dishes on each of the end-user's premises, which collect the relatively weak signal and conducts it to a low-noise block down converter or LNB. The LNB amplifies the relatively weak signals, filters the block of frequencies in which the satellite TV signals are transmitted, and converts the block of frequencies to a lower frequency range. The satellite receiver or Set-top box coupled to the end-user's television demodulates and converts the signals to the desired form (outputs for television, audio, data, etc.). Sometimes, the receiver includes the capability to decrypt the received signal; the receiver is then termed an integrated receiver/decoder or IRD.

3.9.3 The following licensees offer managed transmission services for broadcasting via satellite in South Africa; Sentech (Direct To Home platform), Orbicom, OVHD and ODM. Satellite networks cover 100% of households in South Africa, though households require specialised equipment as well as a subscription to one of the satellite broadcasting distributors in order to receive satellite broadcasting content.

3.10 Other Broadcasting Technologies

Broadcast content is, to some extent, also transmitted over other technologies. A brief assessment of alternative broadcasting technologies is provided below.

3.10. 1 Fixed Network Technology/Optic Fibre

3.10.1.1 Further development and establishment of fixed network technology such as Optic Fiber may represent a possible alternative to the existing technology platforms for broadcast content in the future. Such technology will only make possible fixed reception, i.e. no mobility or portability.

3.10.1.2 Web TV and IP TV exist, but in the Authority's view, the technology has not been adopted widely enough for such services to constitute an alternative for a significant number of end users within the time horizon of this analysis. The Authority's assessment is primarily based on the fact that live TV via the Internet is limited in scope driven by the low penetration of the internet at speeds necessary to support such services. Access and affordability issues still hamper the widespread availability of broadband internet services in South Africa. The Authority considers that IPTV and associated services will not be a realistic alternative distribution platform for broadcasting content until internet services at broadband speeds are available to a significant portion of population.

3.10.2 Mobile TV

There are two forms of mobile TV in South Africa. One uses the data networks of existing mobile networks and allows the streaming of broadcast content. The other is a purpose built mobile TV network which sits alongside the existing mobile network and allows users to access a dedicated network for TV content. e.tv and DStv have both launched a dedicated mobile TV network before (using spectrum allocated to them by the Authority). These services were accessed on a DVB-H enabled mobile phone or via a Mobile TV

decoder (of the DStv service). The DStv offering was a subscription service while the e.tv was offered at no charge to end-users.

3.10.3 Cable

Cable TV is still in its infancy in South Africa. In time, if cable is to be rolled out to cover a significant portion of the population, it could provide an alternative distribution platform for broadcasting content. In other countries, such as the USA and in Europe, cable represents a viable alternative to the existing terrestrial and satellite networks. With a viable cable network, the analysis of market power and the types of remedies considered to address such market power (if found) can be significantly different. However, cable networks are still to be built in South Africa and hence cannot be considered a viable alternative distribution platform for content in the short to medium term.

Question 3: Do you agree with the Authority's preliminary view with regard to the broadcasting transmission services market in South Africa? Please provide reasons for your response.

4 The relationship between retail and wholesale broadcasting markets

As part of the review process, the Authority considered the relevant retail and wholesale markets given that the analysis of retail markets logically precedes the analysis of the wholesale markets.[13] This is mainly because the demand for wholesale services is derived from the demand for retail services. Wholesale markets include all markets in

[13] It should noted that this approach doesn't preclude the Authority from intervening at retail level, if competition is found to be ineffective at that level, as some retail competition issues may not necessarily be addressed at the wholesale level.

which complete and clearly-defined wholesale services are purchased by licensed service providers or broadcasters as inputs into the provision of retail services.

5 The relevant retail markets

5.1 Retail market for the provision of analogue television[14] and radio broadcast content to end-users

5.1.1 The Authority considered whether television content and radio content are in the same or separate markets. The Authority's view is that the two services are complementary rather than substitutes and therefore, are in separate markets.

5.1.2 From the demand-side substitution perspective, the Authority's view is that sufficient end-users are not lilkely to see television and radio content services as substitutes because the viewing (television) and listening (radio) experience are very different forms of broadcasting. This is because the content, experience and attributes of radio and television are significantly different and therefore, a substitution to the other form of broadcasting (if any) is not likely to meet the requirements of sufficient number of radio listeners or television viewers. For example, the needs of radio listeners (e.g. portability – listening in the car, mobile phones, radio) can not be met by television (which is usually watched on stationary devices) and *vice versa*.

5.1.3 From supply side perspective, substitution from television to radio is limited given that the supplier of television content would not only need to obtain a license for radio content (and spectrum), but also incur additional cost in respect of radio

[14] Subscription service markets are not considered part of this study because the Authority has embarked on a separate process to conduct an investigation into subscription services markets.

transmission. Similarly, supply side substitution from radio to television would result in an additional cost as the supplier would be required to convert from audio (radio) to an audiovisual content (television) and also purchase managed transmission services for television. Therefore, the Authority is of the considered view that radio and television content broadcast by terrestrial transmission are in separate markets at the retail level.

Question 4: Do you agree with the Authority's preliminary view with regard to the retail market for the provision of analogue television and radio broadcast content to end-users? Please provide reasons for your response.

5.2 Retail market for the provision of digital television and radio broadcast content to end-users

5.2.1 In terms of the demand side, end-users require digital radio or television, or digital set-top box in order to receive digital signal or broadcast. Whilst the Authority is not able to ascertain with any precision, some end-user's preference of digital over analogue is likely to be driven by multi-channel viewing benefit offered by digital platforms. This switching behaviour is however unlikely to constrain analgoue content providers, if any after full digital switchover. In addition, payment of licensee fee is unlikely to constrain analogue content providers as digital content end-users might pay the same annual license fee paid by the analogue counterparts. Further, the Authority is not able to ascertain the impact, if any, of the switch by advertisers and the reduction in programming spend due to the potential increase in the cost of analogue transmission.

5.2.2 The Authority's understanding is that digital radio (excluding internet radio) is not yet available in South Africa.

5.2.3 From the supply side, the Authority is of the view that supply side substitutability is very limited. This is because the price increase by a hypothetical monopolist digital television or radio transmission provider would not be constrained by analogue television or radio broadcasters who intend to provide digital content services as they would be required to purchase managed transmission services for digital broadcasting. The cost of digital managed transmission services would be signigicant *vis-à-vis* limited profitability due to small digital end-user base. The switch to digital broadcasting may also be restricted by the need to invest in set-top boxes (and or digital radio devices) for end-users in order to stimulate usage of digital television or radio service.

5.2.4 Given the above, the Authority is of the view that there are separate retail product markets for analogue and digital television content as well as separate retail product markets for analogue and digital radio content. The Authority is therefore of the view that the following four markets exist at the retail level:

5.2.4.1 The market for the provision of analogue terrestrial television content broadcast to end-users.

5.2.4.2 The market for the provision of analogue terrestrial radio content broadcast to end-users.

5.2.4.3 The market for the provision of digital terrestrial television content broadcast to end-users.

5.2.4.4 The market for the provision of digital terrestrial radio content broadcast to end-users.

Question 5: Do you agree with the Authority’s view with regard to the retail market for the provision of digital television and radio broadcast content to end-users? Please provide reasons for your response.

6 The relevant Wholesale Markets

6.1 Wholesale market for the provision of analogue and digital terrestrial broadcasting services

6.1.1 The analogue terrestrial network in South Africa is unlikely to provide a real alternative to purchasers of MTS on satellite television networks, because terrestrial networks have a capacity to distribute only a handful of channels. Broadcasters are now forced to go to Sentech for signal distribution because of the Mux 1 network. Going digital does not provide broadcasters with an alternative in respect of the supplier. The move to DTT in the future will allow more channels to be carried in the terrestrial network but the total number of channels is still likely to be less than those available on satellite networks. Nor will broadcasting transmission services on satellite TV networks be a real alternative to the public service broadcaster, SABC as it will be unable to fulfil its population coverage licence conditions if it moved off the terrestrial network and to the satellite network. For a broadcaster to opt out of one distribution platform is likely to involve a substantial regulatory, significant cost and commercial risk.

6.1.2 Apart from Orbicom, which only supplies terrestrial MTS to MNet, there is no alternative terrestrial network supplier to Sentech in South Africa. Some community broadcasters provide their own signal/network. However, the Authority does not have the total number of those broadcasters who self provide due to a range of factors such as high entry barriers, large sunk costs, and long-term contracts with existing broadcasters. It is unlikely that there will be a firm willing to enter the terrestrial broadcasting market to compete with the existing terrestrial providers (Sentech and Orbicom).

6.1.3 In the Authority's view, circumstances on both the supply and demand side indicate that terrestrial networks and satellite networks are in separate markets for MTS. With regard to radio, contrary to TV, both ditigital and analog will continue to co-exist for some time.

Question 6: Do you agree with the Authority's view with regard to the wholesale market for the provision of analogue and digital terrestrial broadcasting services? Please provide reasons for your response.

6.2 Wholesale market for the provision of analogue and digital managed transmission services for terrestrial television broadcasting

6.2.1 While DTT is still being rolled out in South Africa, the Authority considers it useful to provide some initial views on whether MTS for analogue and digital broadcasting on the terrestrial network are in the same market. This analysis is likely to be important over the next 2-3 years as new contracts for digital terrestrial MTS are being negotiated between broadcasters and the supplier of Digital Terrestrial MTS.

6.2.2 It is likely that the same sites will be used for both analogue and digital terrestrial broadcasting. There are likely to be economies of scope in the provision of MTS for both analogue and digital terrestrial broadcasting (sales and maintenance teams are likely to be able to service both). As such, it is likely that a MTS supplier is likely to exploit these economies of scope by providing both analogue and digital MTS. If the same sites are used for both analogue and digital MTS then this will enable the supplier to offer a more competitive service compared to providing only analogue MTS. Broadcasters are likely to choose suppliers that can offer the most competitive prices for wholesale broadcasting transmission, whether analogue or digital. This analysis is consistent with the current trends in the market as Sentech is investing

heavily in DTT. It seems reasonable to assume that Sentech will provide MTS for both analogue and digital terrestrial broadcasting using the same site network.

6.2.3 As such, the Authority considers that the provision of a suite of services using the same sites may indicate that analogue and digital MTS are part of the same market. It is the Authority's initial view that once MTS for digital terrestrial broadcasting is offered that it will be part of the same market as MTS for analogue terrestrial broadcasting.

Question 7: Do you agree with the Authority's view with regard to the wholesale market for the provision of analogue and digital managed transmission services for terrestrial television broadcasting? Please provide reasons for your response.

6.3 Wholesale market for the provision of analogue and digital managed transmission services for terrestrial radio broadcasting (national)

6.3.1 The Authority is of the view that there are a number of factors that suggest that the market for MTS for radio broadcasting on terrestrial networks differs somewhat according to whether the programs are national and/or non-national (i.e., local or regional).

6.3.2 National and non-national radio broadcasters are faced with geographical broadcast limitations and frequency allocations pertaining to their applicable licence and will only obtain access to frequencies reserved for national broadcasting and non-national broadcasting respectively.

6.3.3 In addition, spectrum is a limited resource, and there are complex regulatory processes involved in changing existing frequency plans and frequency use. Due

the fact that frequencies reserved for broadcasting may not be freely bought and sold and it may be resource-intensive to implement changes in frequency use from a purely practical standpoint, it might be difficult to substitute between national and non-national radio transmission services via terrestrial networks.

6.3.4 Due to frequency and regulatory limitations, it will not be possible to substitute local and national and/or regional programming. Geographical boundaries stipulated in broadcasting licences limit a broadcaster purchasing MTS for non-national radio broadcasting from switching its demand to a MTS service in another licensed geographic area.

6.3.5 A local radio station will not demand transmission capacity meant for national radio or vice versa. In addition, content that is meant for a particular community will not necessarily be relevant to national audience.

6.3.6 In addition, substitution between national and non-national transmitter networks is also limited due to technical and cost factors, including the different ranges of transmitters, inappropriate placement of masts and problems with radio spectrum interference. To avoid harmful interference from other adjacent sub-national broadcasters, transmitters with more limited power may be appropriate for the purposes of non-national broadcasting. This may help to limit substitutability between transmission services for non-national local and those for national broadcasting.

6.3.7 From the supply side perspective, a hypothetical monopolist of MTS for non-national radio broadcasting may be constrained from raising prices by 10%. This is due to the likelihood of alternative supply-side options being available, due to low barriers to entry into the market.

6.3.8 In the Authority's view, this indicates that MTS for national radio broadcasting is in a separate market to MTS for non-national radio broadcasting.

Question 8: Do you agree with the Authority's view with regard to the wholesale market for the provision of analogue and digital managed transmission services for terrestrial radio broadcasting (national)? Please provide reasons for your response.

6.4 Provision of analogue and digital managed transmission services for terrestrial radio broadcasting (local or regional)

6.4.1 The Authority considers that there are a number of factors that suggest that the market for MTS for radio broadcasting on terrestrial networks differs somewhat according to whether the programs are local (or regional) or national. Generally, local or regional radio broadcasting services are provided by class licensees while national radio broadcasting services are provided by individual licensees. Owing to the limitations in the licences and frequency allocations, a local or regional radio broadcaster will only obtain access to frequencies reserved for local or regional broadcasting.

6.4.2 Substitution between local or regional and national transmitter networks is also limited owing to technical and cost factors, including the different ranges of transmitters, inappropriate placement of masts and problems with radio spectrum interference. To avoid harmful interference from other adjacent sub-national broadcasters, transmitters with more limited power may be appropriate for the purposes of local or regional broadcasting. This may help to limit substitutability between transmission services for local or regional and those for national broadcasting.

6.4.3 Due to frequency and regulatory limitations, it will not be possible to substitute local and national and/or regional programming. A local radio station will not demand transmission capacity meant for national radio or vice versa. In addition, content that is meant for a particular community will not necessarily be relevant to national audience.

6.4.4 Due to geographical boundaries that are stipulated in broadcasting licences, a broadcaster purchasing a MTS for local radio broadcasting cannot switch its demand to a MTS service in another licensed area.

6.4.5 On the supply side, a hypothetical monopolist of MTS for local radio broadcasting may be constrained from raising prices by 10%. This is due to the likelihood of alternative supply-side options being available, due to low barriers to entry into the market. The Authority's view is that MTS for local or regional radio broadcasting is in a separate market to MTS for national radio broadcasting.

Question 9: Do you agree with the Authority’s view with regard to the wholesale market for the provision of analogue and digital managed transmission services for terrestrial radio broadcasting (local or regional)? Please provide reasons for your response.

6.5 Geographic markets

6.5.1 Terrestrial networks

6.5.1.1 In earlier sections, the Authority concluded that television is in a separate product market to radio and that radio broadcasting should be divided in separate local and non-local product markets. In South Africa, broadcasters demand television

and radio transmission services on both a national and/or regional level and local level. Local radio broadcasting is divided into many licence areas across the country. This may suggest that the market for transmission services for local radio should consist of numerous relevant markets based on the number of geographic licensed areas.

6.5.1.2 However, Sentech has indicated to the Authority that it is the only provider of managed transmission services for terrestrial television broadcasting. For radio, the situation is somewhat different. For national and regional radio broadcasters, Sentech is the only provider of managed transmission services. At the local level, Sentech has indicated that it provides MTS to 118[15] of community broadcasters

6.5.1.3 The Authority understand that MTS for radio and television services are not differentiated geographically in respect of product, quality and price. While there is scope for supply side substitution at the local or regional level for MTS for radio (particularly self-provision by radio and television broadcasters), the Authority considers that it is appropriate to consider the market as national in scope. Dividing the market into numerous geographic areas (according to licence areas) is impractical. As the competitive dynamics within each market change over time (as licensees enter and exit the market for MTS), this would mean that the boundaries identified by the Authority would be unstable and change over time. Also, it is not clear that such an exercise can be carried out with any degree of accuracy.

6.5.1.4 Since Sentech is the only provider of managed transmission services for national free-to-air television and radio broadcasters these networks by their very nature cover the whole country, the Authority assumes that the geographic market for

[15] Sentech Intergrated Report 2021

transmission services for national radio and television, respectively, is all of South Africa. For local or regional broadcasters, the Authority considers that the competitive conditions are similar across regional areas and hence can be considered national in scope.

Question 10: Do you agree with the Authority's view with regard to the terrestrial geographic market? Please provide reasons for your response.

6.5.2 Satellite broadcasting

6.5.2.1 Suppliers of MTS for satellite broadcasting in this market are mainly international, and the relevant market is not necessarily limited to South Africa. The market is more a consequence of a satellite's footprint, which varies somewhat from one satellite to another. However, it appears fair to assume given the nature of the technology, that each supplier of MTS for satellite broadcasting has 100% population and geographical coverage across South Africa.

6.5.2.2 There are factors that may suggest that the market for transmitting broadcasting services via satellite is a trans-national market. Trans-national means extending or operating across national boundaries. For the most part satellite operators provide transmission services over wide regional footprints depending in part on the type of satellite and orbit in which it is placed. It is in the satellite operator's economic interests to serve as many customers as possible and hence broadcast footprints tend to extend over several countries in a region. It is not appropriate (as well as being beyond the Authority's legislative remit) to define markets beyond South Africa's borders. In light of this, the Authority considers that the nature of satellite transmission renders the market for transmitting TV and radio via satellite as being trans-national.

6.5.2.3 However, given that satellite broadcasters are able to limit some broadcasting content to only be available within national borders (i.e., SABC channels), it may be appropriate to define the geographical market as national in scope.

Question 11: Do you agree with the Authority's view with regard to satellite geographic market? Please provide reasons for your response.

7 Assessment of effectiveness of competition

This section undertakes the review of the effectiveness of competition in the relevant wholesale markets defined above by considering the factors below.

7.1 Assessment of effectiveness of competition in the market for the provision of analogue and digital managed transmission services for terrestrial television broadcasting

7.1.1 Market shares

7.1.1.1 The Authority understand that there are only two providers of MTS on the terrestrial nework in South Africa namely, Sentech and Orbicom. The Authority's understanding is that the latter only provides MTS services to M-Net. Whilst the Authority did not receive data from Orbicom, the Authority's view is that Sentench has a very high market share (i.e., greater than 50%) and this is likely to have persisted for many years due to lack of effective competition from Orbicom and limited or no entry into this market over many years.

7.1.1.2 As indicated above, the Authority understand that there are only two operators in the market for the provision of MTS on the terrestrial network. Orbicom has a small terrestrial network when compared to Sentech. Also, the Authority understands that Orbicom purchases a MTS from Sentech in order to provide a national coverage for its sole customer M-Net.

7.1.1.3 The Authority notes that while Orbicom and Sentech are in the same market, Orbicom has chosen to only provide services to M-Net and Multichoice. This means that other broadcasters have no choice but to purchase MTS from Sentech.

7.1.1.4 The Authority considers that it is unlikely that there will be potential new competitors entering the market during the period under review mainly due to the following reasons:

- The high sunk costs and investment required for a new entrant;
- The existence of long-term contracts that will make it difficult for a new entrant to entice existing customers of MTS away from the current suppliers (i.e., Orbicom and Sentech); and
- Technological barriers that would make it difficult for a new entrant to provide an equivalent service to existing suppliers (e.g. if a new entrant built a new network of transmission sites, then the direction of all the antennas for existing customers would need to be re-adjusted in order to provide an equivalent service).

7.1.2 Level and trends in market concentration

The Authority understands that the market is highly concentrated with Sentech having an estimated market share of more than 50%. The Authority considers that this is unlikely to change during the period under review. Sentech is likely to be in a strong position to win

any renewal or extension when existing contracts expire (or when new contracts for DTT are negotiated). This limits the potential for new entry into the market.

7.1.3 Overall size of each market participants

The Authority does not have detailed information on the relative size of Orbicom compared to Sentech in the provision of MTS for television broadcasting

7.1.4 Technological advantages or superiority of a given market participant

While Sentech doesn't necessarily enjoy superiority in the provision of MTS, its investment in the network over many years (including a period when it had exclusivity through legislation regarding transmission high sites) would result in significant benefits in terms of economies of scale and scope compared to Orbicom and any potential new entrant.

7.1.5 Degree of countervailing bargaining power

7.1.5.1 Broadcasters are unlikely to exert any significant countervailing bargaining power on Sentech. Apart from M-Net, none of the other broadcasters has a choice of provider. Due to licence obligations that require broadcasters to provide service to a certain percentage of the population, only MTS over the terrestrial network allows these licence conditions to be met. Satellite broadcasting could potentially provide an alternative way to reach the required population coverage but given that only a minority of the population have the equipment needed to receive satellite broadcasting, this is not a realistic option. This may however change in the digital environment.

7.1.5.2 As far as consumers are concerned (viewers), they are likely to be indifferent to the identity of the supplier of transmission. Since consumers do not pay a charge for transmission, or even a charge for broadcasting based on the level of consumption, their consumption decision cannot impact on the structure of the market. Since the transmission supplier has to provide transmission to a specific quality required by consumers, the choice of transmission supplier is therefore unlikely to be relevant in a consumer's decision to consume television broadcasts. Consumers pay a licence fee irrespective of the amount of viewing consumed. In addition, it may not necessarily matter from a consumer's perspective whether the content is provided over terrestrial or satellite networks (i.e. they would still be required to pay a licence fee). Given this, a decision by a consumer to switch from terrestrial TV to a satellite platform will have no impact on the incentives for pricing of terrestrial transmission. As such consumers have no countervailing bargaining power with respect to the pricing of terrestrial transmission services.

7.1.6 Easy or privileged access to capital markets or financial resources

Given that Sentech is a Government owned entity, and has access to government funding, or other funding at the privileged rates that Governments may attract, it is likely to be in a privileged position compared to privately funded entities.

7.1.7 The ease of entry into the market, economies of scale and scope and control over essential facilities

7.1.7.1 There are a number of significant barriers that make new entry unlikely during the period under review. As such, it is likely that Sentech will continue to be the significant provider of MTS to the majority of national broadcasters of radio and television on the terrestrial network.

7.1.7.2 Even though Orbicom has developed a small terrestrial network, there is no evidence of any entry into the market from either broadcasters or from firms from other markets to provide MTS for national television broadcasting. This is despite the changed licensing regime that now allows any firm with the appropriate licence to self-provide broadcasting transmission services.

7.1.8 The dynamic characteristics of the market

7.1.8.1 As the industry moves from analogue to digital transmission from 31 March 2022, it is clear that the major technological change will occur in the industry over the next few years. However, in terms of the supply of MTS for television broadcasting, many of the same structural features of the service will remain in place over the time period of the market review. This is because it is expected that analogue and digital transmission would co-exists (dual illumination period) during the review period.

7.1.8.2 On the terrestrial network the fundamental requirements of providing a MTS will remain, such as the need to secure mast and sites for transmission services as well as the associated services that make up a managed transmission service including procurement, installation, monitoring and maintenance. Many of these competencies are common to both analogue and digital MTS. It is likely that broadcasters will still require a certain level of service quality as well as specific coverage in order to meet their licence obligations. Hence, it appears that there is little scope for innovation or product augmentation that could encourage a new entrant to provide a differentiated product to entice existing customers away from Sentech. The presence of excess capacity in a market means that the producers are more likely to compete on price in order to capitalise on the available capacity. However, owing to the service being delivered by dedicated equipment and specialised staff, there is no evidence that excess capacity is a characteristic of this market.

7.1.8.3 The Authority considers that there is likely to be a low elasticity of demand for MTS on the terrestrial network. This is due to the fact that obtaining MTS is a necessary requirement for broadcasting on the terrestrial network. Once the broadcaster has obtained the necessary spectrum and broadcasting licences, they can only fulfil their licence obligations to reach a certain percentage of the South African population by obtaining MTS from the terrestrial network supplier. There is no scope for the broadcaster to respond to an increase in the price of MTS by reducing demand or to substitute to an alternative transmission platform, such as satellite. While satellite broadcasting may have wide geographic coverage in South Africa, the fact that most end-users only have access to the terrestrial network to obtain television content means that broadcasters would not be able to meet their licence obligations if they switched their supplier of MTS to a satellite signal distributor.

7.1.9 The nature and extent of vertical integration

This factor is not considered to be relevant since Sentech is not vertically intergrated.

Question 12: Do you agree with the Authority's view on the assessment of effectiveness of competition in the market for the provision of analogue and digital managed transmission services for terrestrial television broadcasting? Please provide reasons for your response.

7.2 Assessment of effectiveness of competition in the market for the provision of analogue and digital managed transmission services for terrestrial radio broadcasting (national)

This market has been defined as managed transmission services that are provided to radio broadcasters that have licences that are national in scope. The Authority is of the considered view that Sentech has SMP in this market and that competition has been found to be ineffective.

7.2.1 Market shares

The Authority considers that Sentech is the only supplier of MTS for national radio broadcasting and that there is no viable alternative supplier of MTS for national broadcasting. Hence, it has a 100 per cent market share in this market and is dominant having significant market power.

7.2.2 Actual and potential existence of competitors

Sentech is the only supplier of MTS in the market for national radio broadcasting. Apart from Orbicom, which only supplies terrestrial MTS to MNet, there is no alternative terrestrial network supplier to Sentech in South Africa. This is due to a range of factors such as high entry barriers, large sunk costs, and long-term contracts with existing broadcasters, it is unlikely that there will be a firm willing to enter the terrestrial broadcasting market to compete with the existing terrestrial providers (Sentech and Orbicom). The Authority is of the view that it is unlikely that any new entrants will emerge in the near future.

7.2.3 Level and trends in market concentration

Sentech currently has 100% market share at the national market for the provision for MTS and it has maintained this dominant market share since it began providing services to the industry. Its existing high market concentration was built up over a number of years when it had exclusivity over the high-sites for transmission masts.

7.2.4 Degree of countervailing bargaining power

There is little to no countervailing bargaining power for radio broadcasters due to Sentech's 100% market share and the lack of choice in terms of other MTS providers.

7.2.5 Easy or privileged access to capital markets or financial resources

Sentech being a state-owned company has access to government funding, or other funding at the privileged rates that government may attract. Sentech is therefore likely to be in a privileged position compared to privately funded entities or other potential new entities.

7.2.6 The ease of entry into the market, economies of scale and scope and control over essential facilities

7.2.6.1 The Authority’s view is that there are high barriers to entry as well as significant sunk costs that a potential new entrant would face. In addition, it is difficult for existing broadcasters to self-provide in this market, given the need to have a

dedicated maintenance team and technical expertise and requirements to manage the quality of the MTS.

7.2.6.2 The Authority considers Sentech to be benefitting from economies of scale due to its extensive nation-wide infrastructure and customer base. Additionally, Sentech also benefits from economies of scope due to the network of high sites and towers as it may also place transmitters for television, radio and potentially other technologies on its towers.

7.2.7 The nature and extent of vertical integration

The Authority has not found evidence of vertical integration nor its impact on the market.

Question 13: Do you agree with the Authority's view on the assessment of effectiveness of competition in the market for the provision of analogue and digital managed transmission services for terrestrial radio broadcasting (national)? Please provide reasons for your response.

7.3 Assessment of effectiveness of competition in the market for the provision of analogue and digital managed transmission services for terrestrial radio broadcasting (non-national)

7.3.1 Market shares

Whilst there are some community radio broadcasters who choose to self-provide MTS, Sentech remains the main supplier of MTS for radio broadcasters of non-national scope.

7.3.2 Actual and potential existence of competitors

While Sentech is the main supplier of MTS to local radio broadcasters, there appears to be a portion of the industry that chooses to self-provide their MTS requirements. The Authority does not, however, have detailed data on the level of self-provision in this market. The Authority does not foresee the number of broadcasters who self provide to be significant nor the threat of potential entry of competitors to be high due to the extremely high costs, sunk costs as well as technical skills, and requirements needed.

7.3.3 Overall size of each the market participants

The Authority does not have detailed information on the community broadcasters that self provide MTS for radio broadcasting. Sentech has the largest terrestrial signal distribution infrastructure for both radio and television, and provides MTS for 118 community radio stations. It also owns 240 towers and masts.

7.3.4 Technological advantages or superiority of a given market participant

7.3.4.1 Sentech in its annual report indicates that it is evolving from a broadcasting signal distributor to a full-service digital infrastructure and platform company in response to the changing business, entertainment and media landscape, technological disruption and the increasing need for connectivity, especially in underserviced areas of South Africa.

7.3.4.2 Over the past few years, Sentech has established a research and innovation capacity to drive growth, efficiencies and technology advancement.

7.3.5 Degree of countervailing bargaining power

Due to community radio broadcasters having to a certain degree an alternative MTS supplier to Sentech in terms of self-provision, there is likely to be a certain level of countervailing bargaining power for some community radio broadcasters. However, besides self-provision, the Authority is not aware of any other alternative suppliers for MTS at the community level and as such, the countervailing bargaining power is limited by the high cost of self-build as an alternative.

7.3.6 Easy or privileged access to capital markets or financial resources

Sentech being a Government owned entity has access to government funding, or other funding at the privileged rates that government may attract. Sentech is therefore likely to be in a privileged position compared to privately funded entities or other potential new entities.

7.3.7 The ease of entry into the market, economies of scale and scope and control over essential facilities

The Authority is of the view that new entry into the market is unlikely in the next few years due to significant entry barriers. Therefore Sentech will likely continue to be the main supplier of MTS to the majority of community radio broadcasters. The entry barriers include the specialised nature of broadcasting technology needed. These structural entry barriers make the market more susceptable to ineffective competition.

7.3.8 The nature and extent of vertical integration

The Authority considers that the local radio stations may be vertically integrated to the extent that they self-provide. However, the Authority does not consider that the level of vertical integration in the community radio broadcasters has a significant impact on the market since it does not appear to provide an ability to lessen Sentech's market power.

Question 14: Do you agree with the Authority's view on the assessment of effectiveness of competition in the market for the provision of analogue and digital managed transmission services for terrestrial radio broadcasting (non-national)? Please provide reasons for your response.

8 Significant market power

Given the above, the Authority's preliminary view is that Sentech has significant market power in the analogue and digital managed transmission services markets given its

assumed market share of at least 50% in the relevant markets. The Authority has however not found evidence of vertical integration by Sentech nor its impact on the market.

Question 15: Do you agree with the Authority's view that Sentech has significant market power in the analogue and digital managed transmission services markets? Please provide reasons for your response.