As a managed transmission service which is provided by one licensee to another, the Authority considers that it is a 'wholesale' service. This approach is consistent with the approach used in other countries where these markets have been reviewed (e.g. Norway, Ireland, UK, France, and Australia).

The Authority's initial view is that there are separate product markets for:

- The provision of managed transmission services for satellite broadcasting;
- The provision of managed transmission services for the purpose of providing analogue (and digital, when available) terrestrial broadcasting transmission services within South Africa to deliver television broadcasting services;
- The provision of managed transmission services for the purpose of providing terrestrial broadcasting transmission services within South Africa to deliver radio broadcasting services at a local level;
- The provision of managed transmission services for the purpose of providing terrestrial broadcasting transmission services within South Africa to deliver radio broadcasting services at a location other than at a local level.

The Authority considers that a national market definition is appropriate for all the product markets identified.

The Authority notes that the approach used to define wholesale broadcasting transmission markets is consistent with the approach used in other countries where this market has been reviewed. The actual markets defined can differ based on factors such as the pervasiveness of different broadcasting platforms (for example, cable has been defined as a separate market in some countries where it is a significant broadcasting technology).

4.4 Product Market Definition

4.4.1 Managed transmission services for satellite and terrestrial broadcasting

Demand in the wholesale market is derived from retail market demand, and is thus primarily affected by price and the type and quality of content. Customers in the wholesale market comprise licensees that produce content and those that distribute as well as licensees that do a mixture of both.

For broadcasters it is important to be present on the network that reaches the most customers. To reach end-users who receive programming via terrestrial networks,

broadcasters cannot choose to purchase managed transmission services solely on satellite networks. This indicates that there is a clear division between analogue terrestrial networks on the one hand, and satellite on the other. If broadcasters wish to reach almost all households, they cannot choose only one network for delivering broadcast content, since the coverage and availability vary between the different networks.

In addition, as discussed earlier, many broadcasters have explicit licence obligations requiring them to cover a certain percentage of the population. As many end-users can only access broadcast content through the terrestrial network, it means that in order for broadcasters to fulfil their licence obligations they have no choice but to purchase MTS from the terrestrial network supplier. Supply-side substitution in this market exists when a provider of MTS can offer customers an alternative if the current provider of MTS raises their prices.

The analogue terrestrial network in South Africa is unlikely to provide a real alternative to purchasers of MTS on satellite TV networks, because terrestrial networks have a capacity to distribute only a handful of channels. 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 onto to the satellite network. For a broadcaster to opt out of one distribution platform is likely to involve a substantial regulatory and commercial risk.

Apart from Orbicom, which only supplies terrestrial MTS to MNet, there is no alternative terrestrial network supplier to Sentech in South Africa. 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).

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.

4.4.2 Managed transmission services on the terrestrial network for radio and television broadcasting, to deliver broadcast content to end-users

This section examines whether the provision of MTS to radio broadcasters on the terrestrial network is part of the same market as the provision of MTS for television broadcasters on the terrestrial network.

If a radio broadcaster faced a 10% price rise from its supplier of MTS, it is unlikely to find MTS for television broadcasting to be an effective demand-side substitute. This is due to the following reasons:

- MTS for Television uses a different technology (transmitters, power levels etc.) to MTS for radio;
- The cost of MTS for television broadcasting is much higher than the equivalent service for radio[22]; and
- Different spectrum is used for MTS for television broadcasting compared to the equivalent MTS for radio.

Similarly, if a television broadcaster faced a 10% increase from a hypothetical monopolist of MTS, they are unlikely to find an adequate substitute in MTS for radio. Television viewers would expect television content and are unlikely to accept radio content as an equivalent alternative.

On the supply side, Sentech supplies MTS for both radio and television broadcasting. There is no existing alternative national provider of MTS for radio that could switch production to provide an equivalent service for television broadcasters. However, the Authority is aware that there are a number of radio broadcasters who self-provide their broadcasting transmission requirements. The Authority considers that it is very unlikely for this to raise the potential for these firms to switch their production and supply for the following reasons:

- Radio broadcasters who self-provide MTS would need to reconfigure their equipment as well as invest in new equipment to be able to transmit to the required frequency for television transmission;
- Investment in expanding the coverage of the network to meet with the requirements of television broadcasters is likely to be required;

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22 The Authority understands that the transmission of radio requires a smaller portion of the existing infrastructure, both in terms of masts and the amount of transmission capacity, than the transmission of television signals. The investment needs are thus correspondingly smaller with correspondingly lower entry barriers.

- Retraining would be needed to deal with the different requirements for MTS for television.

Thus switching production into MTS for television is likely to involve a significant cost making it unrealistic within the timeframe for demand side substitution to occur (over then next 2-3 years). The Authority considers that it is unlikely that there will be any supply-side substitution of MTS for television from local providers of MTS for radio to the extent that it undermines a profitable price rise by a hypothetical monopolist in MTS for television.

The only alternative potential suppliers which currently might be able to provide MTS for radio broadcast are Orbicom and ODM. However, neither of these licensees currently provide MTS for radio and there are likely to be considerable coverage problems as well as significant costs involved in switching production that will make it unlikely that these licensees provide an effective constraint on the current provider of MTS for radio.

On the other hand, there are likely to be economies of scale and scope in using the same sites and masts for both radio and television MTS. This is due in part to the ability of the MTS supplier to use the same maintenance and sales force to provide services for both radio and television. Hence, it is likely that there will be strong commercial incentives for the same provider to provide both MTS for television and radio (especially at a national level, where the network will comprise a number of transmission sites across the country). Any competitive constraint that may act on a hypothetical monopolist of sites used for radio and television would have to come from a provider offering a similar suite of services.

For these reasons, the Authority considers that MTS for television broadcasting can be considered to be in separate markets to the MTS for radio broadcasting.

4.4.3 Managed transmission services on the terrestrial network for local and non-local radio broadcasting

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 national and/or regional in nature (i.e. non-local).

Owing to the limitations in the licences and frequency allocations, a local radio broadcaster will only obtain access to frequencies reserved for local broadcasting,

whereas a regional and/or national radio broadcaster will only obtain access to frequencies reserved for regional and/or national purposes. In addition, spectrum is a limited resource, and there are complex regulatory processes involved in changing existing frequency plans and frequency use. Furthermore, it may be resource-intensive to implement changes in frequency use from a purely practical standpoint. Frequencies reserved for broadcasting may not be freely bought and sold. This makes it difficult to substitute between local and national and/or regional transmission services via terrestrial networks.

Substitution between local and national and/or regional 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 broadcasting. This may help to limit substitutability between transmission services for local and those for national and/or regional broadcasting.

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.

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.

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. For example, the Authority notes evidence from industry that a significant number of community broadcasters (~40%) do not purchase their MTS from Sentech. This suggests that 40% of community broadcasters (many of which have licences within small geographical areas) self-provide their broadcasting transmission requirements.

In the Authority's view, this indicates that MTS for local radio broadcasting is in a separate market to MTS for national and/or regional radio broadcasting.

4.4.4 Managed transmission services for analogue and digital terrestrial broadcasting

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.

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.

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.

4.5 Geographic markets

The geographic market may be defined as that area in which the relevant product is offered on approximately similar and sufficiently homogeneous conditions of competition. The degree of substitutability on both the supply and demand sides may be taken into consideration in the assessment of the geographic market and, as part of such a substitutability assessment on the demand side, preferences and geographic purchase patterns should be taken into account. In practice, geographic markets in the electronic communications sector tend to be determined by reference to the relevant network's licensed area of coverage as well as the jurisdictional boundaries of the legal regulation of the market.

4.5.1 Terrestrial Networks

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.

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, Sentechhas indicated that it provides MTS to 60% of community broadcasters[23].

This suggests that around 40% of community broadcasters self-provide or in some other way obtain broadcasting transmission services. However, the Authority is not aware of any alternative commercial providers to Sentech of transmission services for local radio broadcasting. That is, local radio broadcasters either build their own networks or lease all or part of their capacity requirements from Sentech.

To the Authority's knowledge, Sentech's services are not differentiated geographically in respect of product, quality and price. This applies both to MTS for radio and to television.

While there is scope for supply side substitution at the local level for MTS for radio (particularly self-provision by radio 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.

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

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23Sentech response to ICASA questionnaire as well as Sentech (2010), Annual Report, p. 6.

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

In summary, the Authority considers that all the product markets identified for MTS on the terrestrial network are national in scope.

4.5.2 Satellite broadcasting

Suppliers of MTS for satellite broadcasting in this market are chiefly 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.

Sentech operates a satellite broadcasting platform called Vivid. Sentech states that the Vivid platform offers facilities for satellite based broadcasting, making signals available to end-users that do not have access to terrestrial television and radio transmission[24].Orbicom operates a satellite transmission network and provide MTS solely to MultiChoice broadcasters (DSTV and MNet). ODM self-provides its MTS for satellite broadcasting.

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[25].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. However, given that satellite broadcasters are able to limit some broadcasting content to only be available

[24]Sentech Annual Report (2010), p. 5.
[25] http://oxforddictionaries.com/view/entry/m_en_gb0878030#m_en_gb0878030

within national borders (i.e. SABC channels), it may be appropriate to define the geographical market as national in scope.

Hence, the geographic market could be defined as either national or trans-national in scope. The Authority seeks more information from industry to assist with the market definition.

4.6 Summary of conclusions on Market Definition

Table 2: Summary of conclusions on market definition

List of Proposed Product Markets	List of Proposed Geographic Markets
1. MTS for Television Broadcasting (Analogue and Digital)	National
2. MTS for Radio Broadcasting (Local)	National
3. MTS for Radio Broadcasting (Non-Local)	National
3. MTS for Satellite Broadcasting	Either National or Trans-national

Questions for stakeholders from Chapter 4:

8. Do you agree that the appropriate wholesalebroadcasting transmission service is a Managed Transmission Service? If not, please provide information on an alternative product definition.
9. Do you agree with the list of retail markets that have been identified by the Authority?
10. Do you agree with the list of wholesale markets for MTS that have been identified by the Authority?
11. Do you agree that MTS for satellite and for Terrestrial are in separate markets?
12. Do you agree that MTS for Radio and MTS for Television are in separate markets?
13. Do you agree that MTS for local radio broadcasting is in a separate market to MTS for national and/or regional radio broadcasting (i.e. non-local radio broadcasting?)
14. Do you agree that MTS for Analogue and Digital broadcasting should be considered in the same market?
15. Do respondents agree that the geographic markets for all markets defined for

MTS on the terrestrial network are national in scope?

16. Do respondents have any views on the correct geographic market definition for satellite broadcasting services? Should it be defined as national or trans-national?
17. Do respondents have any views on why any other licensee that owns high sites (apart from Sentech) would not wish to provide wholesale broadcasting transmission services?

5. ASSESSMENT OF MARKET POWER AND IDENTIFICATION OF LICENSEES WITH SMP

5.1 Introduction

This section provides an initial assessment of market power in the markets that have been defined by the Authority.

The nature of the broadcasting industry and television in particular is that broadcasters tend to enter into long-term contracts for the provision of wholesale broadcasting transmission services. The Authority notes that transmission supply contracts between Sentech and the television broadcasters are very long term in nature and often for as long the licensee has a licence (an 'evergreen' contract).

The Authority notes that over the next 2-3 years the industry will need to manage the switchover to digital broadcasting on the terrestrial network. This will involve the re-negotiation of existing terrestrial broadcasting transmission supply contracts. The analysis in this section covers the period of development and contracting for this important change to the industry.

5.2 Assessment of market power in the market for managed transmission services for terrestrial television broadcasting (analogue and digital)

The Authority considers that Sentech has Significant Market Power in this market. As a result this market has been found not to be effectively competitive. The reasons for this are discussed below.

5.2.1 Market share

Sentech has a high market share in the market and this has persisted for many years.There are two providers of MTS on the terrestrial network in South Africa: Sentech and Orbicom. Orbicom only provides MTS to M-Net.

While the Authority recognises that the audience share percentages would include viewers on satellite as well as terrestrial networks, it considers that audience share numbers provide a useful proxy for the relative market share of Orbicom and Sentech for MTS on the terrestrial network. Using this data, and excluding DSTV from the analysis (as DSTV does not broadcast on the terrestrial network), the broadcasters using Sentech's network make up around 99% of the total audience share, while Orbicom's customer (MNet's satellite broadcasting service and DSTV) make up only 1% of the total viewing audience.

E.tv provided the Authority with viewing figures for the major television stations in South Africa for the period January to September 2010. This data is presented in **Table 3**.

Table 3: Channel Audience Share: January-September 2010

Television Channel	Viewer figures (%)
e.tv	20.4
SABC 1	29.6
SABC 2	16.4
SABC 3	13.5
MNet	1.5
DSTV	17.1

Source: e.tv based on AMPS

Using this information, it appears clear that Sentech has a very high market share, which is likely to have persisted for many years.

5.2.2 Actual and potential existence of competitors

As discussed above, there are two existing operators in the market that provide MTS on the terrestrial network. Orbicom has a small terrestrial network when compared to

Sentech (Orbicom231 sites[26] to an estimated 1200 sites for Sentech[27]). The Authority understands that Orbicom purchases a MTS from Sentech in order to provide a national coverage for its sole customer M-Net.

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

The Authority considers that it is unlikely that there will be potential new competitors entering the market in the next 2-3 years. This is for a number of reasons, including:

- 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; and
- Technological barriers that would make it difficult for a new entrant to provide a 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 readjusted in order to provide a equivalent service).

Given these barriers to entry, it is difficult to see how a new entrant could justify the significant investment that would be required to enter the market and compete with existing suppliers.

5.2.3 Level and trends in market concentration

The market is highly concentrated. Sentech has a market share of at least 45% and for many broadcasters is the only option for the supply of MTS for television broadcasting. The Authority considers that this is unlikely to change. 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.

5.2.4 Overall size of each of the 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. However, the size of the respective networks can be estimated in a number of ways:

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[26]Data taken from Orbicom's response to ICASA's industry questionnaire circulated as part of this inquiry.
[27] Estimated from Sentech Annual Report 2010

- Number of Terrestrial Transmission Sites – Orbicomhas 231 sites versus Sentech which is estimated to have over 1200 sites; and
- Revenues (Sentech reports revenues from Terrestrial television of R345, 640,000 in 2010 in its 2010 Annual Report). Orbicom does not report its revenues.

5.2.5 Technological advantages or superiority of a given market participant

Given the maturity of the analogue terrestrial network, it is not clear whether Sentech has any superiority *per se* in the provision of MTS. However, given the investment in the network over many years (including a period when it had exclusivity through legislation regarding transmission high sites), it benefits from considerable economies of scale and scope compared to Orbicom as well as any potential new entrant.

In addition, Sentech has been investing heavily in DTT. This has been funded by Government in order to enable the switchover to Digital TV to meet international and national policy guidelines. As a result, Sentech has significant benefits in providing a MTS for DTT when compared to Orbicom or a potential new entrant.

5.2.6 Degree of countervailing bargaining power

Broadcasters are unlikely to exert any significant countervailing bargaining power. Apart from MNet, 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 a 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. As such, broadcasters are unable to threaten to take their business elsewhere.

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 would not 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.

5.2.7 Easy or privileged access to capital markets or financial resources

The Authority considers that this factor may have a significant impact on the market analysis. Sentechis a Government owned entity, and as such will have access to government funding, or other funding at the privileged rates that Governments may attract. Sentech is therefore likely to be in a privileged position compared to privately funded entities.

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

There are a number of significant barriers that make new entry unlikely over the period of this review (2-3 years). As such, it is likely that Sentech will continue to be the sole provider of MTS to the majority of national broadcasters of radio and television on the terrestrial network[28].

The most significant entry barriers in the market include:

- Broadcasters appear to prefer an 'all in one' solution from a single provider with a guaranteed level of service quality. This indicates the value of a national team of sales and engineering staff from one company as it would be more difficult to maintain quality using regional or local sub-contractors. The desire for an all-in-one solution also strengthens the importanceof track record and existing commercial relationships as a barrier to other new entrants;
- The specialised nature of broadcasting technology which is outside the experience and expertise of most of the existing national engineering field-forces (such as those in other utility sectors); and

[28] Except for MNet who purchases terrestrial MTS from Orbicom

- The likelihood that multi-service customers will continue to want to use one provider for all of their broadcasting transmission services. There are likely to be economies of scope of provision (e.g. the benefits in dealing with one supplier for both radio and television MTS). Also, the forthcoming complex digital switchover project will need to be managed effectively. Customers are unlikely to be keen to purchase MTS from different suppliers during this switchover period.

The Authority notes that DTT has only been rolled out to a small number of sites (and households) and the service itself is still at a pilot stage in a small number of geographic regions across the country. One view is that as digital television is rolled out (and digital transmission is built out to a larger number of sites across the country), there may be potential for third parties to begin to provide MTS from these other sites. However, the Authority believes that this is unlikely to happen in the short to medium term as broadcasters will still prefer to use a single supplier for their digital MTS services.

Historical commercial relationships are likely to be very important in this market. Sentech has been providing MTS to national television and radio broadcasters for many years. They have established procurement, installation, maintenance and monitoring systems to deliver broadcasting transmission services to the quality demanded by their customers in order to meet their licensing requirements (such as the population coverage obligations). Also, a significant part of the costs that Sentech incurs in providing MTS has already been incurred and represent "sunk cost". Sentech's transmission network has been built up over a number of years and a new entrant would need to incur significant upfront investment in order to provide an equivalent MTS to existing customers.

In addition to the significant upfront costs in building a transmission network that could provide an equivalent service to compete with the service supplied by Sentech, a new entrant is likely to face difficulties in convincing existing Sentech customers to switch to a new supplier. A broadcasting customer would need to be convinced that a new entrant with no track record of supplying MTS would be able to deliver a comparable service to that provided by Sentech.

Existing broadcasters and future multiplex licensees are possible new entrants for supplying MTS. In the same way that MultiChoice has Orbicom to supply MTS to its two broadcasting companies (DSTV and MNet), the same structure could potentially occur with other broadcasters. However, in response to question 1.5 of Part B of the Questionnaire, existing broadcasters such as e.tv and SABC have indicated that they

are unable to invest in the range of expertise and skills required to develop an alternative MTS supplier as it is not their core business.

A key characteristic of the market is the agreement of long-term contracts between Sentech and its customers (such as SABC). The long-term nature of these contracts are explained in part by the need to ensure stability of revenues in order for Sentech to invest inthe network as well as a stability of the supply of transmission services to enable broadcasters to meet their licence obligations. This would make it difficult for new entrants to get business from existing broadcasters.

The staggered timing of existing contracts (with some contracts being agreed into perpetuity) would make it difficult for a new entrant to plan its network and build a business case that allows an adequate return on its investment. It will additionally be difficult for a new entrant to compete for the business of existing customers. For example, if an existing customer chose to exit from an existing contract, therefore facilitating new entry, it will likely trigger compensation payments to Sentech.

Apart from Orbicom, which has developed a small terrestrial network there has been 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. However, as discussed earlier, Orbicom has chosen to only provide MTS to M-Net so does not offer a competing service to other broadcasters. Hence, broadcasters have no choice but to purchase MTS from Sentech.

5.2.9 The dynamic characteristics of the market

As the industry moves from analogue to digital transmission, it is clear that there are 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 due to the fact that it is proposed that analogue and digital transmission co-exists (dual illumination period) over a period of time to help with the transition to DTT.

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.

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.

DTT provides the potential for new sources of demand; however, due to the greater efficiency of spectrum use, it is unlikely to lead to higher volumes of MTS in aggregate.

The maturity of the market suggests that Sentech is unlikely to have any realistic threats of competition from new entrants, given the lack of dynamism and the existence of legacy contracts in the market

5.2.10 The nature and extent of vertical integration

The Authority does not consider that this factor has a significant impact on the market analysis. Sentech is not vertically integrated (i.e. it does not produce content). Orbicom is part of a broader group of companies, which include a distributor of content (MNet), however, given Orbicom's relatively small market share (compared to Sentech); this does not have a significant impact on the competitive analysis.

5.3 Assessment of market power in the market for MTS for radio broadcasting (non-local terrestrial)

This market is defined as managed transmission services that are provided to radio broadcasters that have licensed areas that are national or regional in scope. Local broadcasting is not included in this market and has been defined separately.
The Authority considers that Sentech has SMP in this market and that competition has been found to be ineffective.

5.3.1 Market share

The Authority understands that Sentech is the only supplier of MTS for national and/or regional radio broadcasting (i.e. non-local). Hence, it has a 100 per cent market share in this market.

5.3.2 Actual and potential existence of competitors

Sentech is the only supplier in the market. Similar to the analysis for MTS for television broadcasting, the Authority considers that it is unlikely that any new entrants will emerge in the near future.

5.3.3 Level and trends in market concentration

Sentech currently has 100% market share at the national and/or regional market and it had 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. The inability for any firm to provide a MTS in the years while the national transmission network was being rolled out is likely to be a contributing factor to why the market is highly concentrated.

5.3.4 Overall size of each of the market participants

Sentech is the only provider in the market. Sentech has not provided a detailed breakdown of its revenues for the non local terrestrial radio broadcasting market, to allow for an estimate of the absolute size of its business in this market segment.

5.3.5 Technological advantages or superiority of a given market participant

Similar analysis can be applied in this market to that used for Sentech's market advantages in MTS for television broadcasting.

5.3.6 Degree of countervailing bargaining power

There is little to no countervailing bargaining power for radio broadcasters or for end-users (listeners) due to the lack of choice of other MTS providers and Sentech's 100% market share, and the relative scale of an individual radio broadcaster's contract compared with Sentech's overall revenues. Similar analysis can be applied in this radio transmission market to the analysis used for MTS for television broadcasting where Sentech has more than 98% market share.

5.3.7 Easy or privileged access to capital markets or financial resources

In a similar manner to the analysis made above for the market for MTS for television broadcasting, Sentech is a Government owned entity, and as such will have 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.

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

Similar analysis can be applied in this market to that used for Sentech's market advantages in MTS for television broadcasting. The Authority considers there are high barriers to entry as well as significant sunk costs that would be faced by a new entrant. It is difficult for existing broadcasters to self-provide in this market, given the need to have a dedicated maintenance team to manage the quality of the MTS. Broadcasters have told the Authority that they do not have the necessary in-house skills to self-provide transmission services and consider that Sentech is the only option for their MTS requirements.

Based on the country-wide Infrastructure that Sentech controls and the customer base that it attracts, the Authority regards Sentech as benefiting from economies of scale. In addition, due to the network of high sites and towers, Sentech benefits from economies

of scope since it may place transmitters for television, radio and potentially other technologies on its towers.

Although the facilities required for wholesale broadcasting transmission are extremely difficult and potentially very expensive to duplicate, the facilities may be duplicated if an entrant firm really wished to make the significant investment. The Authority, therefore, does not consider these to be "essential facilities", as tested against the definition in the ECA.

5.3.9 The dynamic characteristics of the market

Similar analysis can be applied in this market to that used for Sentech's market advantages in MTS for television broadcasting.

5.3.10 The nature and extent of vertical integration

The Authority does not consider that this factor has a significant impact on the market analysis.

5.4 Assessment of market power in the market for MTS for radio broadcasting (local terrestrial)

This market is defined as managed transmission services that are provided to radio broadcasters that have small geographically licensed areas or, in other words, are local in scope. The Authority considers community broadcasters are customers of MTS in this market. National and regional radio broadcasting is not included in this market and has been defined separately.

The Authority considers that Sentech has SMP in this market based on its market share and therefore the market has been found to be ineffectively competitive.

5.4.1 Market share

The Authority considers that all community radio broadcasters are local. Sentech has indicated that it supplies MTS to 60% of community radio broadcasters. Hence, the Authority considers that it is reasonable to assume that Sentech has a 60% market share in the local radio broadcasting market.

5.4.2 Actual and potential existence of competitors

While Sentech is the main supplier of MTS to local radio broadcasters, there appears to be a significant portion of the industry that chooses to self-provide their MTS requirements.

5.4.3 Level and trends in market concentration

The Authority does not have detailed data on the level and trends in market concentration in this market. However, Sentech has indicated that it supplies MTS to 60% of community broadcasters (which the Authority considers are all local radio broadcasters). This suggests a highly concentrated market. The new ECA introduced a technology neutral licensing regime that allows licensees to self-provide their transmission facilities. In addition, the electronic communications facilities leasing regulations provide a framework for access to the high-sites and other electronic communications facilities of Sentech as well as other infrastructure providers. This provides an alternative avenue to purchasing MTS from the national terrestrial network (Sentech) for existing broadcasters to self-provide their transmission requirements.

5.4.4 Overall size of each of the market participants

This factor is helpful in assessing market power with reference to the size of the undertaking that might provide an advantage over its competitors.

The Authority considers that the largest provider in this market is Sentech (which offers MTS for local radio broadcasters across the country). With a national terrestrial network it is a significantly larger undertaking than each of the local community broadcasters who self-provide their broadcasting transmission services.

Where local radio broadcasters self-provide their transmission requirements the scope of their transmission network will be equal to the size of their licensed area. The Authority is not aware of any local broadcasters that use third party wholesale providers (who could provide MTS across a larger range of licensed coverage areas). The Authority is also not aware of local radio broadcasters who have pooled their resources and provided broadcasting transmission services beyond the licensed coverage area of an individual broadcaster.

Community broadcasters who indicated that they self-provided their transmission requirements did not provide sufficient information on the size of their operations.

5.4.5 Technological advantages or superiority of a given market participant

Technical advantages or superiority may represent a barrier to entry and also possibly an advantage over existing competitors. Unlike national and regional MTS for radio broadcasting, local MTS is likely to require much lower power transmission and the technology is potentially more reliable. MTS for local radio broadcasting requires less specialised skills in the provision of the service, which allows some local radio broadcasters to self-provide their MTS requirements.

5.4.6 Degree of countervailing bargaining power

Compared to MTS for national and regional radio broadcasting, there is likely to be greater countervailing bargaining power in this local terrestrial broadcasting market as local radio broadcasters do have an alternative to Sentech as a supplier, i.e. to self-provide, or to purchase from a third party MTS party (if one existed).

However, besides self-provision, the Authority is not aware of any other alternative suppliers for MTS at the local level.

5.4.7 Easy or privileged access to capital markets or financial resources

As before, Sentech is a Government owned entity, and as such will have access to government funding, or other funding at the privileged rates that Governments may attract. Sentech is therefore likely to be in a privileged position compared to privately funded entities.

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

Control or ownership over a large network may present a significant barrier to entering the market, particularly if entering the market requires the entrant to invest significant time and resources to replicate the incumbents' network. Sentech already has an extensive national terrestrial network that provides MTS for local radio broadcasters across the country.

Local broadcasters have the ability to request access to Sentech's transmission sites, as well as the sites of other infrastructure owners to install transmission equipment. Local broadcasters can request and receive access using the provisions of the Electronic Communications Facilities Leasing regulations. These regulations act to reduce the costs of entry into the market for local broadcasters. In this market, therefore, the impact of the economies of scale and scope that Sentech enjoys is reduced. While this regulation is available, however, the Authority understands that these regulations have not been applied in any significant way in this market

5.4.9 The dynamic characteristics of the market

Similar analysis can be applied in this market to that used for Sentech's market advantages in MTS for television broadcasting and for non-local radio broadcasting.

5.4.10 The nature and extent of vertical integration

In considering the local market, local radio stations may, in fact, be vertically integrated to the extent that they self-provide. However, the Authority does not consider that the level of vertical integration in a number of the local radio broadcasters has a significant impact on the market analysis since it does not appear to provide an ability to counter significantly the market power of Sentech.

5.5 Assessment of market power in the market for MTS for satellite broadcasting

Based on the discussion in section4.4.4, the Authority is not in a position at this stage to make conclusive decisions regarding the market power for satellite broadcasting transmission services. Moreover, due to the potentially trans-national nature of this market, the Authority is also not in a position to regulate this market, as the providers of satellite transmission services fall outside of the Authority's jurisdiction.

To clarify this statement, it should be understood that the broadcasters that make use of satellite broadcasting transmission services fall within the Authority's jurisdiction and require licenses, however the satellite broadcasting transmission service providers themselves do not require to be licensed in South Africa.

It is nevertheless noteworthy that the Authority considers that existing market dynamics for the satellite wholesale broadcasting transmission services market tend towards competitive outcomes. While there are likely to be quite high barriers to entry into the

market, there already exist a number of firms supplying MTS for satellite broadcasting in South Africa (Orbicom, Sentech and ODM). In addition, customers of MTS for satellite broadcasting have a range of options when choosing a supplier and can relatively easily switch between suppliers if required. For this reason, it is likely to be difficult for existing suppliers to maintain prices above competitive levels for a sustained period.

In addition, the Authority notes that the channels of free-to-air public broadcasters (SABC 1, 2, 3) are carried by satellite broadcasters at no charge to the public broadcaster. This is due to regulatory conditions that have been imposed on subscription broadcasters that oblige them to carry public broadcasting channels.

The above factors, when combined with regulations already in place (i.e. 'must-carry' 'obligations) mean that the Authority does not consider it necessary to carry out a full market analysis and that no pro-competitive remedies are likely to be needed in this market.

Questions for stakeholders from Chapter 5:

18. Do you agree with the initial views of the Authority that Sentech has SMP in the market for MTS for national terrestrial television broadcasting?
19. Do you agree with the initial views of the Authority that Sentech has SMP in the market for MTS for the purpose of national terrestrial radio broadcasting (non-local)?
20. Do you agree with the initial views of the Authority that Sentech has SMP in the market for MTS for the purpose of national terrestrial radio broadcasting (local)?
21. Do you agree with the initial views of the Authority that the market for MTS for the purpose of satellite broadcasting is effectively competitive and falls outside of its jurisdiction due to its trans-national nature?
22. Do you have any data regarding the market, other than that used by the Authority to make its initial views?

6 THE CONSEQUENCES OF MARKET POWER AND INITIAL VIEWS ON PRO-COMPETITIVE REMEDIES

6.1 Introduction

Based on the information set out in the Discussion Document, the Authority has identified the following national markets:

- The provision of managed transmission services for satellite broadcasting;
- The provision of managed transmission services for the purpose of providing analogue (and digital, when available) terrestrial television broadcasting services within South Africa;
- The provision of managed transmission services for the purpose of providing terrestrial radio broadcasting services within South Africa at a local level; and
- The provision of managed transmission services for the purpose of providing terrestrial radio broadcasting services within South Africa at a location other than at a local level.

This section provides an initial assessment of the potential consequences of ineffectivecompetition in the above-mentioned markets. It also provides an overview of potential pro-competitive remedies that can be imposed in light of the Authority's initial views on the level of competitiveness of the defined markets. The Authority considers that further competition is unlikely in the markets for MTS on the terrestrial network (radio and TV). The Authority considers that these markets are not dynamic and have limited prospects for new entry. It is also considers that the current state of these markets is likely to persist for the period under review, even with developments such as the migration to digital television broadcasting.

Chapter 10 of the ECA sets out the approach that the Authority must adopt in addressing anti-competitive behaviour and the procedures it must follow in applying *ex-ante* measures to licensees found to have significant market power within the defined markets where competition is found to be ineffective. The Authority has proposed a definition of the market for wholesale broadcasting transmission services and set out a preliminary assessment of the market in this Discussion Document. In analysing the wholesale broadcasting transmissionservices market, the Authority has set out a methodology that it proposes using to determine the effectiveness of competition and the pro-competitive conditions that may be imposed upon licensees with SMP where the Authority determines such markets or market segments have ineffective competition.

The Analysis suggests that there may be SMP in the terrestrial network in all the 3 defined markets, but not in the MTS market for satellite.

6.2 The Consequences of SMP in the defined markets

In the absence of regulation, licensees found to have SMP can potentially adversely impact the market through exploiting their market power. In the provision of MTS on the terrestrial network, the following potential consequences of market power are relevant:

- Inefficient and excessive pricing of MTS;
- Provision of MTS at an inferior level of quality;
- Delays in providing MTS within reasonable timeframes.

The purpose of proposed regulation of the markets is to ensure that consumers of MTS can secure it on reasonable terms. The purpose of regulation in the wholesale market is ultimately to benefit end-users. In the terrestrial broadcasting market the benefits to end-viewers are likely to be indirect in nature as end-users of 'free-to-air' broadcasting do not pay directly for the service (apart from an annual TV licence fee). The benefits would accrue through, for example, the flow-on effects of lower input costs to broadcasters, which could lead to better quality programmes as well as greater broadcasting content offered.

6.3 Available Pro-competitive Remedies

There are a range of pro-competitive remedies available to address the potential impact of SMP in a market. The ECA provides a non-exhaustive list of remedies or pro-competitive terms and conditions that may be imposed; including but not limited to:

- timely compliance with license terms and pro-competitive conditions.
- to act fairly and reasonably in relation to provisioning of services, facilities leasing and access;
- transparency through obligations to publish terms and conditions;
- non-discrimination;
- accounting separation, and compliance to prescribed accounting methods; and
- price controls, such as cost orientation.

The Authority must, in terms of the ECA, consider all of the potential remedies and decide which are the most appropriate to impose, if any, based on an assessment of the markets.

6.4 Principles to be applied in imposing pro-competitive remedies

Regulatory action is warranted when SMP is found in a properly defined market. In terms of section 67(4)(c), the Authority is required to set out the pro-competitive measures that it may impose in order to remedy the perceived market failure in the markets or market segments found to have ineffective competition.

The Authority is furthermore required to:

- promote an environment of open, fair and non-discriminatory access to broadcasting services, electronic communications networks and to electronic communications services (section 2(g);
- promote competition within the ICT sector (section 2(f);
- refrain from undue interference in the commercial activities of licensees while taking into account the needs of the public (Section 2(y);
- provide access to broadcasting signal distribution and encourage the development of multi channel distribution systems in the broadcasting framework (Section 2(x); and
- promote stability in the ICT sector (section 2(z).

As such, the specific obligations imposed must be based on the nature of the problem identified, and must be proportionate and justified. Proportionality refers to the Authority undertaking the minimum intervention required, to achieve the objective set out.[29] This approach will ensure that regulation, when it is applied, is targeted at addressing market failure in the defined markets. This approach is aligned with requirements for proportionality as set out in several other jurisdictions including the European Union.

In addition to being proportionate, a remedy should be justified and related to solving a potential competition problem identified in the market. As such, each remedy considered in this Discussion Document seeks to address one of the problems of inefficient provision of wholesale broadcasting transmission services. Problems could arise either through raising prices for access to the wholesale inputs above a competitive level, and/or by providing access at an inferior level of quality, as discussed immediately below. The proposed remedies seek to prevent the effects of the potential problems in the markets, and to counter the consequences of SMP in the defined markets. Finally,

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[29]ERG Common Position on the approach to appropriate remedies in the new regulatory framework, page 62

the Authority recognises that all the remedies it proposes to impose must be analysed in a forward looking manner, and has included this in its assessment.

6.5 Potential remedies applicable to the identified markets

The Authority believes that taking into account all of the possible remedies, the behavioural remedies that may be the most appropriate to apply in the MTS markets where the Authority considers competition is ineffective, could include:

- An access obligation;
- A transparency obligation, and specifically an obligation to publish a Reference Offer;
- A non-discrimination obligation, including non-discrimination on pricing;
- A related wholesale price control obligation, where charges for network access would be reasonably derived from the costs of provision; and
- A cost accounting obligation to support the price control obligation.

The approach to each proposed obligation is discussed below.

The Authority is of the view that the imposition of *ex ante* obligations does not depend on the abuse of a dominant position; but it seeks to prevent such abuse. Therefore the Authority has amongst its options, the option to put in place pro-competitive remedies to ensure access, transparency and non-discrimination to enable all broadcasters to compete effectively. The Authority would furthermore seek to introduce the pro-competitive remedies to remove the market distortions that occur as a result of inefficient pricing and low quality service provision.

The remedies are furthermore aimed at providing certainty to the market with respect to the treatment of wholesale broadcasting transmission services in the period under review. The consideration of this market is timely in view of the renegotiation of contracts soon to provide for digital switchover, which may put Sentech in a position of strength as the industry negotiates with it to ensure the timely implementation of DTT rollout. This legal and policy certainty is critical in the interests of licensees and consumers alike.

6.5.1 Access Obligations

In South Africa, the requirement to provide access is one that applies to all parties providing facilities as a general obligation in terms of section 43(1) of the ECA and the

Facilities Leasing Regulations made in terms of that section. All operators must meet reasonable requests for facilities, including equipment like feeders and antennae, which are used by suppliers of MTS to transmit the broadcast signal (i.e. those that are technically and economically feasible and will promote the efficient use of electronic communication networks and services). They must accordingly make information available to facilities seekers with respect to terms and conditions, including prices. Section 43 of the ECA and the Facilities Leasing Regulations made in terms of section 44(1) of the ECA impose a broad range of obligations for access broadly, which also apply to the wholesale broadcasting transmission markets, including the obligation to:

- negotiate in good faith;
- maintain supply;
- specify technical requirements;
- abide by fairness conditions
- abide by reasonableness conditions (technical and financial feasibility, and promotion of the efficient use of electronic communication networks and services)
- meet designated timelines.

The Authority is of the view that the existing Facilities Leasing Regulations which apply to the provision of facilities broadly can be used to promote the self-provisioning and leasing of wholesale broadcasting transmission facilities and services that fall within the scope of the markets as defined. This would additionally cover the markets for access to masts and sites for the purposes of self-providing wholesale broadcasting transmission. The Authority is of the view that in light of the information obtained through the questionnaire and evidence presented to the Authority during industry interviews, the timeframes for provision of access and the finalisation of agreements could be a challenge for new entrants and smaller broadcasters. There is no evidence of the broadcasting sector having used these regulations to request access, or to address any problems that may have arisen from accessing MTS, such as agreement terms and conditions, quality of service requirements, Service Level Agreements (SLAs) and disputes. The Authority thus proposes ensuring awareness by broadcasting licensees of the Facilities Leasing Regulations, and reinforcing the access obligations set out in the regulations. It is the Authority's view that this approach would be appropriate and proportionate to address the concerns raised relating to access.

6.5.2 Transparency obligations, specifically an obligation to publish a Reference Offer

Imposing an ex ante obligation of transparency as provided for in terms of section 67(7) (d) and (e) of the ECA can be used in relation to addressing potential problems in the defined markets. Section 45 of the ECA provides,amongst others, transparency related obligations; concluded agreements must be made public. This acts as a constraint to anti-competitive behaviour which might otherwise emerge such as delaying tactics, refusal to deal and discrimination.

It is necessary to avoid the effects of inefficiencies at the level of the SMP Operator, the impact of delaying tactics and disputes. It is furthermore critical to ensure that broadcasters seeking access to MTS do not have their costs unduly raised through the behaviour of a SMP Operator. As such, the Authority considers that it may be beneficial to the market for SMP Operators to publish a standard Reference Offer for MTS within a reasonable period (e.g. 3 months) after the finalisation of any regulations that may result from any ensuing process.

A requirement to publish a Reference Offer serves two key purposes – assisting with transparency so that potential anti-competitive behaviour can be more effectively monitored; and making clear and available the terms and conditions on which other providers will purchase upstream inputs. Effectively, the Reference Offer will ease market entry through facilitating quicker negotiations, avoiding disputes on standard terms, and providing new entrants with confidence in terms of the access, quality and pricing that they receive from the SMP operator. This in turn improves competition in the market as well as the relevant upstream markets.

In light of the definition proposed in the Discussion Document of managed transmission services which includes 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 satellite distribution network, charges under the Reference Offer must be sufficiently unbundled to discourage tying and bundling so that facilities seekers are not required to pay for facilities or services that are not necessary for managed transmission services. At a minimum, the Authority proposes that an operators' Reference Offer must include a description of:

- the relevant facilities and services on offer;
- the associated terms and conditions, including charges, ordering, billing and dispute resolution processes;
- technical issues;

- access requirements to allow for the installation and maintenance of broadcasting transmission equipment and related equipment (by the licensee or by third parties);
- access to allow for the connection of such equipment for power or other essential services;
- access to and use of broadcast equipment that can be shared such as data lines, transmitters and feeders; and
- Terms relating to maintenance, quality and safety standards including Service Level Agreements and standards.

The Authority is cautious about imposing regulation in a heavy handed manner. The Authority believes that the Reference Offer obligation is not overly burdensome since the SMP Operator must prepare facilities leasing agreements in the form of Master Signal Distribution and other agreements in any event. They also are likely to have existing price lists for MTS in place. The requirement relates to the standardisation and publication of same. It provides that the SMP Operator advise potential facilities seekers of the terms on which services are expected to be commonly provided and will ease the provision of access by the SMP operator. A benefit of this for the SMP Operator is that it may encourage the use of its facilities and increase the effective use of assets.

The Authority's thinking is that the Reference Offer will include reference to proposed charges for different elements of network access, which charges should be cost oriented. The charges for the provision of managed transmission services must be reasonably derived from the cost of provision.

Questions on Transparency

22. Do the existing Facilities Leasing Regulations adequately address the potential challenges with respect to entering into a Master Service Agreement with Sentech?
23. Are any amendments to the regulations needed to better cater for the potential consequences of SMP in the defined markets, or are separate regulations needed? (Please explain)?
24. Is access an appropriate remedy in light of structural concerns with the market (high sunk costs, no possibly of a new entrant in the short term, etc?
25. Is the proposed Transparency Obligation appropriate, proportionate and justifiable?
26. If the obligation is adopted, should the Authority provide a Model RO, or should the obligation rest on the SMP Operator to initiate the RO?
27. What is the most efficient and effective way to make an RO available to all affected operators to use as they enter into negotiations with the SMP Operator (i.e. website, Library, etc?

28. Should existing agreements be amended to bring them into line with the terms of the published RO? If not, how should existing agreements be treated?

6.5.3 Non-discrimination obligations, including non-discrimination on quality and pricing

A non-discrimination obligation as provided for in section 67(7)(c) of the ECA requires an SMP Operator to apply equivalent conditions in equivalent circumstances to competitors that provide equivalent services, and provide services and information to others under the same conditions and of the same quality as it provides for its own services, or those of its subsidiaries, partners or affiliates. A non-discrimination obligation requires that third party access seekers are treated in a similar manner and no less favourably than the SMP operators' internal divisions.

Section 43(7) of the ECA and the Facilities Leasing Regulations also provide for non-discrimination with respect to the leasing of facilities (broadly). Section 43(7) provides that:

> *"The lease of electronic communication facilities....must, unless otherwise requested by the leasing party, be non-discriminatory as among comparable types of electronic communications facilities being leased and not be of a lower technical standard and quality than the technical standard or quality provided by such electronic communications network service licensee to itself or an affiliate"*

The manner in which the Authority proposes imposing a non-discrimination obligation is through enforcement of the Facilities Leasing Regulations coupled with a (transparency) requirement for operators with SMP in the defined markets to be required to prepare and make available an MTS Reference Offer.

6.5.4 Non-Discrimination on Quality

The non-discrimination obligations include non-discrimination on quality. It is important that the SMP provider of MTS provides such services at an agreed standard. Through anecdotal evidence and interviews it has become clear that some of the smaller broadcasters have concerns relating to the SLA with Sentech. The Authority proposes including a standard SLA in the Reference Offer. This will promote both transparency and non-discrimination.

6.5.5 Non-Discrimination on Pricing

The non-discrimination obligations set out in existing regulations and legislation do not create any obligations with respect to pricing. The proposed obligations arising from this market review complement the existing framework in that they include non-discrimination obligations with regard to pricing. The Authority understands that volume based discounts may be provided, and does not seek to prevent this commercial behaviour if it is done in a fair and transparent manner. Non-discrimination on pricing can be enforced through inclusion of price lists in the Reference Offer.

Questions on Non-Discrimination
29. Is the proposed Non-Discrimination Obligation appropriate, proportionate and justifiable? Please explain your views?
30. Are there other areas in addition to pricing and QoS whether there are concerns relating to non-discrimination?
31. Should existing agreements be amended; and, if so, how?

6.5.6 Price control Obligation

Section 67 of the ECA allows for the Authority to impose price control obligations in markets where ineffective competition has been found. The ECA provides that the Authority may impose *"such price controls, including requirements relating to the provision of wholesale and retail prices..."* Price Control obligations can range from light (e.g. an obligation that prices are fair and reasonable) to heavy (e.g. an obligation that prices are cost oriented or cost-based).

In a competitive market,pricing for MTS would in all likelihood be cost-reflective; this is due to the presence of effective pricing constraints that would be in place in light of competition. In order to prevent the risk of excessive pricing that exists in a market with insufficient competition, one of the potential consequences of SMP, the Authority's initial view is that it may impose requirements regarding the recovery of costs and may require that the charges for MTS and network access be cost oriented.

6.5.7 Approaches to imposing a price control obligation

Any wholesale price control mechanism that the Authority adopts will have to promote efficiency in a sustainable manner which does not distort the market. ICT regulators control the prices in markets where there appears to be an access bottleneck due to the

existence of market power according to the costs that an efficient operator employing the latest available technology would incur. In arriving at the costs of an 'efficient operator', the Authority is aware of the need to balance the needs of the public and end users who seek high quality services at reasonable and affordable rates with those of operators who need to achieve a suitable rate of return on their investment. Any proposed "efficient charge" that the Authority could set would have to take into account these considerations.

There are different forms of wholesale price control possible to try to determine what an appropriate and efficient charge would be. Various approaches have been adopted globally including:

- At cost orientation using cost information;
- A price cap regime, where the prices of an SMP operator are regulated but the operator is rewarded for becoming more efficient; and
- At a benchmark level (using relevant benchmarks appropriate to a given country);

The approaches set out above are not mutually exclusive. The Authority notes that cost orientation is best achieved using information obtained through a cost model. The Authority has to date not created a cost model that would enable it to accurately estimate MTS prices, nor did Sentech provide sufficient information in response to the industry questionnaire to conduct proper cost analysis. As a future remedy, the Authority could impose a regulatory accounting requirement to enable it to gather information for use in the next review of these markets. However, the Authority believes that setting such an obligation at this stage would be a burdensome approach, and may not be proportionate. Instead, in the absence of cost information obtained from the industry, the Authority is reluctant to set a specific price, but seeks to take into account market developments by requiring that:

- Pricing in the digital transmission era cannot be any higher than existing contracted pricing for analogue transmission services and should be expected to be lower (given the greater efficiency of the spectrum use). New MTS agreements be negotiated further to the publication of the MTS Reference Offer which includes standard pricing

In light of the numerous facilities and services included under MTS (i.e. signal distribution, maintenance, installation etc) the Authority could approach this obligation in a number of ways:

- On one hand, the Authority could deal with the pricing of each specific service provided as part of the managed service separately; or
- it could require that the MTS charge be reasonably derived from the costs of provision, as has been done in other jurisdictions.

The Authority is of the view that in light of the information available to it and bearing in mind the characteristics of the market, the latter approach is preferred. It guards against SMP operators raising prices to levels that were not reflective of costs and offers a basis for investigating such prices in the event of necessary regulatory intervention. It is proportionate as it is confined to the MTS and it furthermore ensures that Sentech may allow for the realistic costs of provision to be accounted for when setting prices and does not exclude them from making flexible pricing decisions where objectively justified.

In addition to imposing a pricing obligation, the Authority considers that it may be worthwhile to put in place measures to ensure that licensees can appeal a proposed price, should they have information to indicate that it is excessive. Under an appeals mechanism, the Authority can address the complaint through existing processes.

Questions on Price Control Obligation

32. Is the proposed Pricing Obligation appropriate, proportionate and justifiable?
33. Do you agree with the 'light touch' approach that the Authority proposes relating to cost orientation?
34. Do you believe that a Regulatory Accounting obligation would be proportionate to the harm that the remedy seeks to address?
35. Should existing agreements be considered for amendment with respect to price? Please provide justification in support of your view?

7 APPENDICES

7.1 Appendix A: Summary of the steps needed to define a market

The first step is to outline the services to be considered relevant for a market definition process from a functional and geographic perspective.

A relevant product market comprises products or services that are sufficiently substitutable. An assessment of demand-side substitutability is the starting point for the definition of a relevant product market. It is also relevant to assess whether substitutability exists on the supply side of the market.

Demand-side substitutability exists when two or more products in the market are, in the perception of the end user, mutually exchangeable or substitutable on the basis of certain characteristics (such as price and the utility they provide to the end-user).

Supply-side substitutability exists when providers of other (non-substitutable) products, as a response to a small price change in the short term, can change their production or distribution and offer substitutable products without incurring significant additional costs or substantial risk.

An acknowledged method of analysing substitutability is the so-called 'hypothetical monopolist test'. The aim is to find the best-defined market in which a hypothetical monopolist is able to exercise market power. The test is done on the basis of a small but significant (in practice 5-10 %) and non-transitory increase in price (SSNIP) for the relevant product, based on the assumed price level in a market with effective competition. All other prices are assumed to be unchanged. Then one assesses the effect of the price increase in the relevant market and assesses the total effect on the producer's revenue as a result of the price increase.

The method depends on a significant amount of data that will often be difficult to produce. Alternative approximation methods may therefore also be applied.

The hypothetical assessment should be supplemented by actual information on behaviour on the supply and demand sides to the extent that such information is available. On the demand side, allowance should be madefor such factors as an end users' access to information, switching costs and other lock-in mechanisms. On the supply side, account should be taken of the actual potential a provider has to change

production as well as any regulatory conditions that prevent market entry by competitors in the market.

Once the relevant product markets have been identified the next step is to define the geographic market. The outer geographic borders for the relevant product market will generally be determined by the extent of the network and the jurisdiction of the legal regulation of the market. The extent to which a more detailed geographic definition of the market has to be carried out will rest on an assessment of the substitutability of the relevant products and services on the supply and the demand side, using the Hypothetical Monopolist test, as described above.

The relevant geographic market is that area in which the relevant products and services are provided on sufficiently similar or homogeneous competitive terms. In assessment of substitutability on the demand side it is important to take account of preferences and geographic purchase patterns, if such information is available. With this as the basis the markets can be defined regionally within the national frontiers, nationally or trans-nationally. Given jurisdictional issues, the Authority can only define regional or national markets.