

Broadcasting transmission services: A review of the market

Proposed identification and analysis of markets,
determination of market power
and setting of SMP conditions

Explanatory statement and notification

**This is the non-confidential version of the consultation document.
Confidential information and data have been redacted.
Redactions are indicated by “[X]”**

Issued: 11 November 2004

Closing date for responses: 22 December 2004

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Section 1

Summary

A new regulatory regime

- S.1 A new regulatory framework for electronic communications networks and services entered into force in the UK on 25 July 2003. The basis for the new framework is five new EU Communications Directives that are designed to create harmonised regulation across Europe. Four of these Directives have been implemented in the UK via the new Communications Act 2003 (the “Act”). The new Directives require National Regulatory Authorities (“NRAs”), inter alia, to carry out reviews of competition in communications markets to ensure that regulation remains appropriate in the light of changing market conditions.

Previous consultation

- S.2 On 9 September 2003, the Director General of Telecommunications (“the Director”) published a national consultation document entitled “Review of competition: broadcasting transmission services” (“the September Consultation”). That document invited comments on his proposals for defining the market for access to masts and sites, on his proposals about the state of competition in those markets, and on the remedies which might be applied. The period of consultation closed on 10 November 2003.

The present document

- S.3 Having considered responses to the consultation document, Ofcom is setting out in the present document its draft decisions, which, in some respects, differ from those set out in the September Consultation. Where this is the case, those differences have been highlighted. The Notification under section 48(2) and section 80 of the Act recording Ofcom’s proposals is at Annex 4. Stakeholders may make representations within the period ending on **22 December 2004** to margaret.doherty@ofcom.org.uk. As required by Article 7 of the Framework Directive and section 50 and 81 of the Act, the draft decisions are being sent to the Secretary of State and also being made available to the European Commission and to other NRAs as, in Ofcom’s opinion; the proposals may affect trade between member states.

Proposed identification of markets

- S.4 This document considers broadcasting transmission services, to deliver broadcast content to end-users over the period up to about 2007, by which time contracts for achieving switchover of terrestrial television from analogue to digital transmission should have been agreed. Within these services, Ofcom proposes to identify the following economic markets, which, in Ofcom’s opinion, are the ones in relation to which it is appropriate to consider whether to make a market power determination:

Markets for access to masts and sites:

- the provision of access to the mast and site network and shared or shareable antenna systems acquired, constructed or installed by Crown Castle for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver broadcast content to end users on a national, regional or metropolitan basis.
- the provision of access to the mast and site network and shared or shareable antenna systems acquired, constructed or installed by ntl for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver broadcast content to end users on a national, regional or metropolitan basis.
- the provision of access to other masts, sites and shared or shareable antenna systems used for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver broadcast content to end users.

Markets for managed transmission services:

- the provision of terrestrial managed transmission service for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver a National Broadcast Service;
- the provision of terrestrial managed transmission service for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver other than a National Broadcast Service.

S.5 These proposed markets have been amended from those outlined in the September Consultation document. In that document, no market was identified for managed transmission services (either as a national or local and regional market), and radio and television were assessed throughout as two separate markets.

Assessment of market power

S.6 Having analysed the operation of these markets Ofcom proposes that significant market power is held as follows:

- (i) the provision of access to the mast and site network and shared or shareable antenna systems acquired, constructed or installed by Crown Castle for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver broadcast content to end users on a national, regional or metropolitan basis
- Market not effectively competitive, significant market power enjoyed by Crown Castle.
- (ii) the provision of access to the mast and site network and shared or shareable antenna systems acquired, constructed or installed by ntl for the purpose of providing analogue and/or digital terrestrial

broadcasting transmission services within the United Kingdom, to deliver broadcast content to end users on a national, regional or metropolitan basis

- Markets not effectively competitive, significant market power enjoyed by ntl.
- (iii) the provision of access to other masts, sites and shared or shareable antenna systems used for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver broadcast content to end users
- Market effectively competitive and no supplier has significant market power
- (iv) the provision of terrestrial managed transmission service for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver a National Broadcast Service
- Markets not effectively competitive, significant market power enjoyed by ntl and Crown Castle jointly.
- (v) the provision of terrestrial managed transmission service for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver other than a National Broadcast Service
- Market effectively competitive and no supplier has significant market power.

Regulatory remedies

S.7 Given the proposed position of dominance variously enjoyed by Crown Castle and ntl Ofcom proposes to impose conditions as follows:

Markets for the provision of access to the mast and site network and shared or shareable antenna systems acquired, constructed or installed for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver broadcast content to end users on a national, regional or metropolitan basis (conditions applicable to ntl and Crown Castle separately)

- requirement to provide network access to their respective masts and sites on reasonable request;
- requirement not to unduly discriminate in that provision of network access;
- requirement to provide network access to their respective masts and sites on cost-orientated terms.
- requirement to publish a Reference Offer for that provision of network access;

Market for the provision of terrestrial managed transmission service for the purpose of providing analogue and/or digital terrestrial broadcasting

transmission services within the United Kingdom, to deliver a national broadcast service (conditions applicable to each of ntl and Crown Castle)

- requirement to provide network access in relation to managed transmission services on reasonable request;
- requirement not to unduly discriminate in the provision of managed transmission services;
- requirement to provide network access in relation to managed transmission services on cost-orientated terms.

- S.8 The following significant changes are proposed to the regulatory remedies compared to those set out in the September 2003 consultation.
- S.9 The Ofcom consultation had proposed that network access should cover access to the masts and sites of Crown Castle and ntl (as providers having significant market power “SMP”). However, it was clear from responses that remedies at this level of the market could not be expected to fully alleviate the positions of SMP. The provision of a fully managed broadcast transmission service is the preferred model that national terrestrial broadcasters and digital multiplex licensees in particular use in order to provide broadcast content to their end-users. Ofcom has therefore reviewed the competitive state in both the markets for access to masts and sites and the market for managed transmission services. It proposes that market power resides at both levels of the market.
- S.10 Nevertheless, each market level has competitive and non-competitive segments. Ofcom has therefore, in coming to these revised proposals, made a number of other refinements to its approach to market definition and analysis with the aim of distinguishing these segments in a practical way. Principally, these refinements affect the position of sites used only for radio broadcasting transmission. In the previous consultation, these were all regarded as being within a competitive market; however, on the basis of stakeholder comments received and further consideration, Ofcom has reviewed this position.

Final steps

- S.11 When Ofcom has considered any representations made within the period to **22 December 2004**, including any made by the Commission, they may give effect to the proposals, with or without modifications, by identifying markets, making market power determinations and setting conditions. Ofcom will do this by publishing a further Notification accompanied by a further and final Explanatory Statement. Ofcom will, at that time, also discontinue current regulation which has been continued for an interim period as explained at 2.12 below. Ofcom's proposals in this respect are set out in the draft discontinuation notices in Annex 5.

Section 2

Introduction

A new regulatory regime

- 2.1 A new regulatory framework for electronic communications networks and services entered into force on 25 July 2003. The framework is designed to create harmonised regulation across Europe and is aimed at reducing entry barriers and fostering prospects for effective competition to the benefit of consumers. The basis for the new regulatory framework is five new EU Communications Directives:
- Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services (“the Framework Directive”);
 - Directive 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities (“the Access Directive”);
 - Directive 2002/20/EC on the authorisation of electronic communications networks and services (“the Authorisation Directive”);
 - Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services, (“the Universal Service Directive”) and;
 - Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector (“the Privacy Directive”).
- 2.2 The Framework Directive provides the overall structure for the new regulatory regime and sets out fundamental rules and objectives which read across all the new directives. Article 8 of the Framework Directive sets out three key policy objectives which have been taken into account in the preparation of this consultation document, namely promotion of competition, development of the internal market and the promotion of the interests of the citizens of the European Union. The Authorisation Directive establishes a new system whereby any person will be generally authorised to provide electronic communications services and/or networks without prior approval. The general authorisation replaces the former licensing regime. The Universal Service Directive defines a basic set of services that must be provided to end-users. The Access and Interconnection Directive sets out the terms on which providers may access each others' networks and services with a view to providing publicly available electronic communications services. These four Directives were implemented in the UK on 25 July 2003. This was achieved via the Communications Act 2003 (“the Act”). The fifth Directive on Privacy establishes users' rights with regard to the privacy of their communications. This Directive was adopted slightly later than the other four Directives and was implemented in the UK on 11 December 2003 via regulations under the European Communities Act 1972.

Implementation

- 2.3 The Act provides for functions, powers and duties to be carried out by Ofcom

which include, inter alia, functions, powers and duties flowing from the four EC Communications Directives referred to above. Certain functions that were previously undertaken by the Director General of Telecommunications (“the Director”) were also transferred to Ofcom.

- 2.4 The Communications Act 2003 (Commencement Order No. 1) Order 2003 was made under sections 408 and 411 of the Act. This order commenced certain provisions of the Act for the purpose of enabling the networks and services functions under those provisions to be carried out by the Director until such time as those functions were transferred to Ofcom at the end of 2003. Ofcom has now fully assumed its functions as of 29 December 2003 (by virtue of Article 3(2) of the Office of Communications Act 2002 (Commencement No. 3) and Communications Act (Commencement No. 2) Order 2003). As a consequence of the transitional period however the first national consultation on broadcast transmission was carried out by the Director (in September 2003) whilst this consultation is now being carried out by Ofcom.

Market reviews

- 2.5 The new Directives require National Regulatory Authorities (“NRAs”) such as Ofcom to carry out reviews of competition in communications markets to ensure that regulation remains appropriate in the light of changing market conditions. This document is part of the ongoing market review process which the Director had commenced and Ofcom is now undertaking.
- 2.6 Oftel published a national consultation document entitled “Review of competition: broadcasting transmission services” on 9 September 2003¹ (“the September Consultation”). That document invited comments on proposals for defining markets for access to masts and sites for the purposes of terrestrial television and radio broadcasting, on proposals about the state of competition in those markets, and on the remedies which might be applied. The period of consultation closed on 10 November 2003. Having considered responses to the consultation document, Ofcom is setting out in the present document its refined proposals in the form of a draft decision; the Notification setting out the proposed conditions is at Annex 4. Stakeholders may make representations within the period ending on **22 December 2004**. Arrangements for making representations are explained in section 6.
- 2.7 Each market review has three parts:
- definition of the relevant market or markets;
 - assessment of competition in each market, in particular whether any companies have Significant Market Power (SMP) in a given market, and;
 - assessment of what are the appropriate regulatory obligations which should be imposed where there has been a finding of SMP (NRAs are obliged to impose some form of regulation where there is SMP).
- 2.8 More detailed requirements and guidance concerning the conduct of market reviews are provided in the Directives, the Act, and in additional documents issued by the European Commission and Oftel. As required by the new

¹ http://www.ofcom.org.uk/static/archive/oftel/publications/eu_directives/2003/broad0903.pdf

regime, in conducting this review Ofcom has taken the utmost account of the two European Commission documents discussed below. In addition, Ofcom has had regard to the April 2004 ERG Common Position on the approach to appropriate remedies in the new regulatory framework².

EC Commission “Recommendation on relevant product and service markets”

2.9 The Commission has identified in its Recommendation, a set of markets in which *ex ante* regulation may be warranted. The Recommendation seeks to promote harmonisation across the European Community by ensuring that the same product and service markets are subject to a market analysis in all Member States. However, NRAs are able to regulate markets that differ from those identified in the Recommendation where this is justified by national circumstances. Accordingly, NRAs are to define relevant markets appropriate to national circumstances, provided that the utmost account is taken of the product markets listed in the Recommendation. This is reflected in section 79 of the Act.

EC Commission “Guidelines on market analysis and the assessment of SMP”

2.10 The European Commission has also issued Guidelines on market analysis and the assessment of SMP (“SMP Guidelines”). Ofcom is required to take these guidelines into account when identifying a services market and when considering whether to make a market power determination under section 79 of the Act.

Obligation to inform the Commission and other NRAs

2.11 As required by Article 7 of the Framework Directive and sections 50 and 81 of the Act, these draft decisions are also being sent to the European Commission and to other NRAs as, in Ofcom's opinion; the proposals may affect trade between member states. The Commission and other NRAs may make comments within the consultation period. If the Commission believes that one of the market definitions, or proposals to designate a provider with SMP or proposals to designate no provider with SMP, would create a barrier to the single market or if the Commission has serious doubts as to its compatibility with Community law, and issues a notice under Article 7(4) of the Framework Directive, Ofcom is required by section 82 of the Act to delay adoption of these draft measures for a further period of 2 months while the Commission considers its position.

Regulation pending the completion of market reviews

2.12 The new Directives also allow member states to carry forward some existing regulation until the market reviews have been completed and new conditions

² http://erg.eu.int/doc/whatsnew/erg_0330rev1_remedies_common_position.pdf

are put in place. Continuation notices have therefore been issued to relevant communications providers to maintain the effect of certain provisions contained in licence conditions that existed under the Telecommunications Act 1984 prior to 25 July 2003 until, inter alia, the market review process is finished. Further details on this continuation regime may be found at: http://www.ofcom.org.uk/static/archive/oftel/publications/eu_directives/continotices/index.htm. The continuation notices relevant to this document are those issued to ntl and Crown Castle on 23 July 2003 which may be found at http://www.ofcom.org.uk/static/archive/oftel/publications/eu_directives/continotices/crown.pdf (Crown Castle) and http://www.ofcom.org.uk/static/archive/oftel/publications/eu_directives/continotices/ntl.pdf (ntl). Once this review is complete, Ofcom proposes to discontinue these notices, and has published draft Discontinuation Notices (Annex 5).

Scope of this review and the extent of existing regulation

- 2.13 This review addresses the broadcasting transmission services used to deliver broadcast content to end-users (i.e. viewers and listeners to television and radio) which is one of the markets identified in the Recommendation. These services include transmission of broadcast content to end-users via cable, satellite and terrestrial transmission networks, but for reasons outlined in section 3, this document proposes to identify a narrower market including terrestrial broadcasting transmission only. Terrestrial transmission is presently received via analogue and digital sources in households, but there are plans to switch to fully digital terrestrial broadcasting by 2012.
- 2.14 For UK television, terrestrial broadcasting transmission services are accessed through the masts and sites of the terrestrial transmission network. This network is currently operated by two companies, National Transcommunications Limited (“ntl”) and Crown Castle UK Limited (“Crown Castle”), who operate a service split across the UK (they each have around half the sites, with no practical overlap between any of the sites with each other).
- 2.15 For UK radio, this service is accessed both through the masts and sites of ntl and Crown Castle, and in some cases via other provision such as mounting antennae on tall buildings. There is more potential overlap between ntl and Crown Castle for the purposes of radio broadcasting to certain areas. This is discussed in section 3.
- 2.16 To date, what the UK terrestrial television broadcasters, primarily public service broadcasters³ acquire – either directly for analogue or via digital multiplex licensees⁴ – is a managed transmission service (“MTS”) from Crown Castle (BBC) and ntl (the other PSBs). There are a number of commercial channels on digital multiplexes which also acquire an MTS, from both ntl and Crown Castle via the multiplexes. This service involves content being sent from broadcasters’ studios to mast sites, and the transmission companies arranging for it to be transmitted from those mast sites to the viewers and

³ BBC, ITV, Channel 4/S4C, Five and Teletext

⁴ For the purpose of this document, multiplex licensee should be taken to include both the BBC multiplexes (Multiplexes 1 and B)

listeners at home, as specified by the broadcasters. As will be discussed, broadcasters and multiplex licensees (“broadcasters”) have very specific needs regarding the masts and sites to be used for this purpose. In the case of radio broadcasters, a similar situation applies. However, in some cases radio broadcasters may be able to use a wider range of locations from which to transmit, and ntl and Crown Castle are not the exclusive providers of transmission from their sites. In some instances radio broadcasters self-provide MTS.

- 2.17 There are a range of elements involved in the terrestrial transmission of broadcast content to end-users. As mentioned above, the broadcasters’ content must be transported from their studio to the transmission site and thence to the end-user via terrestrial transmission. Transport from the studio to the transmission site may be carried out via a range of options including by fixed line and by satellite. The market review documents “A Review of the retail leased lines, symmetric broadband origination and wholesale trunk segments markets: Final Statement and Notification” (issued by Ofcom on 24 June 2004⁵) and “Wholesale International Services markets: Final Explanatory Statement and Notification”⁶ (issued by Oftel on 18 November 2003⁷) discussed those means of conveyance, and therefore those elements of transmission will not be analysed further in this document.
- 2.18 The nature of the broadcasting industry and television in particular is that broadcasters tend to enter into long term contracts. This is likely to persist over the near future because of the planned switchover to digital broadcasting in the UK which brings with it a substantial need for investment. This review will therefore cover the period of development and contracting for this major change to the industry – up to around 2007. Beyond the initial period of digital rollout, it is envisaged that the competitive conditions may be different and a further review may be appropriate.
- 2.19 Until July 2003, ntl and Crown Castle had a number of obligations via their Telecommunications Act licences which affected their provision of broadcasting transmission services. Their main provisions were:
- Requirement to share sites;
 - Requirement to provide broadcast transmission services;
 - Requirement to keep separated accounts; and
 - Restriction of prices for television broadcasting transmission (an RPI-x price control).
- 2.20 Under the continuation notices referred to at 2.12 above, the requirement to share sites and the restriction of prices obligations were continued.

Final steps

- 2.21 When Ofcom has considered any representations made in response to the present document within the period to **22 December 2004**, including any

⁵ http://www.ofcom.org.uk/consultations/past/llmr/statement/state_note.pdf

⁶ http://www.ofcom.org.uk/static/archive/oftel/publications/eu_directives/2003/wis1103.pdf

⁷

http://www.ofcom.org.uk/static/archive/oftel/publications/eu_directives/2003/eu_idd/index.htm

made by the Commission, it may give effect to the proposals, with or without modifications, by making market power determinations and setting conditions. This will be done by publishing a further Notification accompanied by a further and final Explanatory Statement. Ofcom will, at that time, also discontinue current regulation contained in continuation notices as referred to at paragraph 17 above. Thereafter, the markets and the new regulatory remedies which have been imposed will be reviewed at appropriate intervals.

Outline of this document

2.22 The rest of the document is structured as follows:

| | |
|-----------|---|
| Section 3 | defines the relevant markets; |
| Section 4 | assesses whether there is SMP in those markets; |
| Section 5 | assesses the options for regulatory remedies in those markets where SMP has been found; |
| Section 6 | explains how to make representations. |
| Annex 1 | outlines Ofcom's consultation principles |
| Annex 2 | contains the consultation response cover sheet |
| Annex 3 | lists the respondents to the September Consultation |
| Annex 4 | contains the Notification containing Ofcom's proposed draft measures |
| Annex 5 | contains the draft Discontinuation Notices in respect of ntl and Crown Castle |
| Annex 6 | contains a regulatory impact assessment |
| Annex 7 | outlines a range of sites used for FM broadcasting |
| Annex 8 | covers specific issues raised by consultation respondents and stakeholders |

Section 3

Market definition

Identification of markets

- 3.1 Section 79(1) of the Act provides that before a market power determination may be considered, Ofcom must identify the markets which are, in its opinion, the ones which, in the circumstances of the United Kingdom, are the markets in relation to which it is appropriate to consider such a determination and to analyse that market. Ofcom is, as noted above, required to take due account of all applicable guidelines and recommendations issued by the European Commission. It is required to issue a notification of its proposals. It is entitled, by virtue of section 79(5) of the Act, to issue this notification with the proposal as to a market determination and alongside proposals for setting SMP services conditions. The notification at Annex 4 is a single notification containing all such proposals.

Approach used to define markets

- 3.2 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. Ofcom's approach to market definition follows that used by UK competition authorities (see *Office of Fair Trading Market Definition Guideline, OFT 403*, March 1999 and the draft revised version of April 2004, which is in line with that used by European and US competition authorities.
- 3.3 Market boundaries are determined by identifying constraints on the price-setting behaviour of firms. There are two main competitive constraints to consider: how far it is possible for customers to substitute other services for those in question (demand-side substitution); and how far suppliers could switch, or increase, production to supply the relevant products or services (supply-side substitution) following a price increase.
- 3.4 The concept of the 'hypothetical monopolist test' is a useful tool to identify close demand-side and supply-side substitutes. A product is considered to constitute a separate market if a hypothetical monopoly supplier could impose a small but significant, non-transitory price increase (SSNIP) above the competitive level without losing sales to such a degree as to make this unprofitable⁸. 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 monopolist, then the market definition should be expanded to include the substitute products.
- 3.5 Throughout this document, markets will be defined first on the demand-side. The analysis of demand-side substitution will be undertaken by considering if other services could be considered as substitutes by customers, in the event of the hypothetical monopolist introducing a SSNIP above the competitive level.

⁸ The OFT Guidelines suggest that a price increase is to be defined as an increase of 5-10% above the competitive level.

- 3.6 Supply-side substitution possibilities will then be 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. The OFT Guidelines on Market Definition, OFT 403, March 1999 (and the draft revised version of April 2004), consider the “relatively short period” to be within a year.
- 3.7 There might be suppliers who provide other services but who might also be materially present in the provision of demand-side substitutes to the service for which the hypothetical monopolist has raised its price. However, such suppliers are not relevant to supply-side substitution since they supply services already identified as demand-side substitutes. As such their entry has already been taken into account and so supply-side substitution cannot provide an additional competitive constraint on the hypothetical monopolist. However, the impact of expansion by such suppliers can be taken into account in the assessment of market power.
- 3.8 A third factor that should be considered is whether there are common pricing constraints across customers, services or areas such that they should be included within the same relevant market even if demand- and supply- side substitution are not present.

Relationship between the wholesale and retail markets

- 3.9 This consultation document defines the relevant markets both at the retail and the wholesale level. Consideration of the relevant retail markets logically precedes the analysis of the wholesale markets, since the demand for wholesale services is derived from the demand for retail services.
- 3.10 The purpose of this market review is to assess whether a provider has SMP in a wholesale market and to identify appropriate remedies to address the existence of market power. It is, therefore, necessary for the definition of retail markets to be undertaken in the absence of regulation of wholesale services. To do otherwise would mean that the wholesale market power assessment would depend on a retail market definition that relied on a wholesale remedy arising from the finding of wholesale market power. This would be a circular and incorrect approach to market definition. Therefore, the demand side and supply side substitution possibilities at the retail level are considered only if they are viable in the absence of regulated wholesale inputs.

Commission’s approach to market definition

- 3.11 In formulating its approach to market definition, Ofcom has taken due account of the Commission's Recommendation.
- 3.12 Recital (7) of the Recommendation clearly states that the starting point for

market definition is a characterisation of the retail market over a given time horizon, taking into account the possibilities for demand and supply side substitution. The wholesale market is identified subsequently to this exercise being carried out in relation to the retail market. This approach is repeated in section 3.1 of the Explanatory Memorandum to the main Recommendation (the “EM”) and is exactly that set out above and followed by Ofcom.

- 3.13 Section 3.1 of the EM also states that, because any market analysis is forward – looking, markets are to be defined prospectively taking account of expected or foreseeable technological or economic developments over a reasonable horizon linked to the timing of the next market review. Again, this is the approach followed by Ofcom.
- 3.14 Furthermore, section 3.1 of the EM states that market definition is not an end in itself, but a means to assessing effective competition for the purposes of ex-ante regulation. Ofcom has adopted an approach by which this consideration is at the centre of its analysis. The purpose of market definition is to illuminate the situation with regard to competitive pressures. For example, Ofcom's approach to supply side substitution explicitly identifies as the key issue the question of whether additional competitive constraints on pricing are brought to bear by additional suppliers entering the market. Thus, the key issue is not the market definition for its own sake, but an identification of the extent and strength of competitive pressures.
- 3.15 Also section 4 of the EM states that retail markets should be examined in a way that is independent of the infrastructure being used, as well as in accordance with the principles of competition law. Again this approach is key to Ofcom's analysis.
- 3.16 Ofcom's approach is based on a competition law assessment of markets and an assessment of the extent to which switching among services by consumers constrains prices, irrespective of the infrastructure used by the providers of those services.

Market definition – broadcasting transmission services market

- 3.17 The Recommendation identified the ‘broadcasting transmission services, to deliver broadcast content to end users’ as being susceptible to *ex ante* regulation. Ofcom takes broadcasting in this context to mean the ‘traditional’ broadcasting of content for reception by television and radio. The Commission’s recommendation does note that in the future “other transmission channels are likely to become more common” but that currently end users may receive radio and television broadcasting via terrestrial, cable or satellite networks, and this is therefore Ofcom's starting point for consideration.
- 3.18 Ofcom has based its analysis on the Commission’s recommendation, but is of the view that in order to identify the key issues of particular relevance to broadcasting in the UK it is necessary to segment this market further.
- 3.19 Broadcasting transmission services are currently available in the UK through terrestrial, cable and satellite technology. As explained below, Ofcom does not consider cable and satellite broadcasting transmission to be part of the

same market as that of terrestrial broadcasting transmission. This is because, although cable and satellite may be substitutes for terrestrial television at the retail level, (although there may be switching costs and coverage problems), they do not provide a constraint on terrestrial transmission. This is because PSBs and digital multiplex licensees, who are the main purchasers of terrestrial transmission, are required under their obligations to provide terrestrial transmission to end-users. Although there are free to air (non-PSB) services available via cable and satellite transmission, such services also cannot provide any indirect constraint on terrestrial transmission for viewers, since analogue viewers of terrestrial transmission cannot avail of such services. Therefore, cable and satellite transmission services could not be considered as demand-side substitutes for terrestrial transmission. On the supply side, cable and satellite transmission providers have chosen to provide transmission through a specific delivery mechanism and therefore are unlikely to begin providing a terrestrial transmission service within the timeframe that is relevant to supply side substitution. This implies that a hypothetical monopolist of terrestrial transmission would remain unconstrained in its ability to raise prices above the competitive level.

- 3.20 Ofcom therefore considers terrestrial transmission to be in a separate market to cable and satellite transmission.
- 3.21 Unlike cable and satellite transmission, terrestrial transmission is available free to air to all end-users of television and radio, and has the largest market share (44% of all UK television households use terrestrial transmission as their sole means of reception⁹) of any transmission method. In addition, almost all households could switch to terrestrial reception if they chose – of the UK's households with digital television, 25% still use analogue terrestrial transmission as well as a reception mode. Due to this, Ofcom considers that consumer detriment following from the possible exercise of market power in terrestrial transmission is of particular concern.
- 3.22 The Commission recommended three criteria that must be met if markets are deemed suitable for *ex ante* regulation. These criteria are: barriers to entry, whether the market is moving towards effective competition; and the efficacy of competition law. Ofcom is using these criteria to come to the decision as to whether to review particular markets.
- 3.23 In relation to the satellite market, Ofcom has examined the present regulatory measures and the likelihood of putting in place effective *ex ante* regulation. Uplinking to satellites was considered in Ofcom's market review "Wholesale International Services markets: Final Explanatory Statement and Notification"¹⁰ (issued on 18 November 2003). The satellite transmission system differs from terrestrial and cable as it is not located in the UK. Most satellite broadcasts which reach the UK come from the Astra satellite which is not within the UK's jurisdiction. What is controlled in the UK is the technology used to receive and encrypt satellite broadcasts: conditional access. The conditional access service used in the UK is provided by Sky Subscribers

⁹ "Digital Television and Broadband continue to grow, shows Ofcom research" Ofcom news release, 2 June 2004

¹⁰ http://www.ofcom.org.uk/static/archive/oftel/publications/eu_directives/2003/wis1103.pdf

Services Limited (“Sky”). Oftel determined in July 2003¹¹ that Sky should provide conditional access services to broadcasters on fair, reasonable and non-discriminatory terms. Ofcom is therefore of the view that there is no merit in carrying out a review of satellite transmission services at this time.

- 3.24 With the issue of cable transmission, one of the key issues, as with terrestrial transmission, is securing the carriage of public service broadcasters to all television households. At present the cable companies voluntarily carry all PSB programming free of charge to their subscribers and to the PSBs. Ofcom notes that the Communications Act includes provisions (the “must carry” requirements¹²) permitting carriage obligations in relation to PSB programming to be imposed on the cable companies for public policy reasons. Ofcom is also aware that since the last time that cable market was reviewed (Oftel: ‘Open access: delivering effective competition in communications markets’¹³: April 2001) when Oftel found that cable operators did not enjoy market power at the retail level, cable companies’ shares of retail television markets have decreased. Ofcom considers that this may be partly due to satellite having been relatively more successful in attracting new pay-TV subscribers; partly due to the rapid take-off of the Freeview digital terrestrial service¹⁴.
- 3.25 For these reasons, Ofcom considers that neither cable nor satellite transmission is a candidate for review at this time and consequently has no current plans to review the markets for provision of these services.

Draft decision on the relevant market

- 3.26 The market definition which is proposed in this section is based on the evidence available to Ofcom and takes account of comments made in the first stage of consultation which closed on 10 November 2003. Annex 3 lists those organisations that responded to that consultation exercise.

Description of products and services

- 3.27 Before proceeding with the market definition it may be useful to describe in more detail the nature of terrestrial broadcasting services in the UK.
- 3.28 A vital input required for broadcast radio and television terrestrial transmission is the network of antennae support structures (“masts”) at specific locations (“sites”). There are several ways in which masts for broadcasting may be operated in the UK. Masts may be located on sites which have been purchased by a terrestrial transmission provider for broadcasting and owned outright by that provider – this is likely to be true of many of the larger, permanent tower structures. Masts may also be installed on sites which are leased by a terrestrial transmission provider 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 a terrestrial transmission provider on masts owned by other organisations (such as the

¹¹ ‘The Regulation of conditional Access: setting of regulatory conditions’

http://www.ofcom.org.uk/static/archive/oftel/publications/eu_directives/2003/condac0703.pdf

¹² <http://www.legislation.hmso.gov.uk/acts/acts2003/30021--c.htm#64>

¹³ <http://www.ofcom.org.uk/static/archive/oftel/publications/broadcasting/opac0401.pdf>

¹⁴ See “The Communications Market 2004”, Ofcom paragraph 4.4 for market information
http://www.ofcom.org.uk/research/industry_market_research/m_i_index/cm/cmpdf/tele.pdf

police or other telecommunications operators), rooftops of tall buildings or different structures which offer the necessary height.

- 3.29 Presently, the great majority of masts suitable for national television and radio transmission are controlled by one of two companies: Crown Castle UK Limited (“Crown Castle”) or National Transcommunications Limited (“ntl”) and all shareable antenna systems used for such transmission are operated by those companies. Each company operates masts distributed across the UK, with each operating masts which have coverage areas for television of around half the UK. This coverage is not split into two discrete geographical areas but rather the sites are dotted across the UK. There is no practical overlap between the sites for television broadcasting, as they were not planned to offer any duality of service.
- 3.30 Two forms of terrestrial transmission are presently used for delivery of both sound broadcasting (radio) and television: analogue and digital. These have similarities in respect of some of the inputs used (e.g. network infrastructure, skills base) and may have some common end-users (viewers and listeners), but differ in certain aspects. The differences include the power of transmission level used, the equipment used for transmission, the spectrum used, capacity (digital transmission can carry much more content than analogue) and end-users – analogue end-users would need to invest in new receiving equipment and may need aerial adjustments to receive digital signals.
- 3.31 Public service broadcasters (PSBs) and digital multiplex licensees (“broadcasters”) are the immediate customers for terrestrial television transmission¹⁵. Broadcasters are tied to the use of both analogue and digital terrestrial transmission by their obligations (the BBC Charter Agreement for the Corporation, and licence obligations for the commercial PSBs – ITV, Channel 4, Five, S4C, Teletext and the digital multiplex licensees). These obligations effectively require the broadcasters to achieve a specified level of coverage of broadcast content to end-users through using both analogue and digital terrestrial transmission means of delivery of that content. This coverage is achieved by using a designated set of mast locations set out in its obligations. If a PSB did not broadcast on the agreed frequency and from the designated location set out in those obligations, it would be in breach of those obligations. Commercial digital multiplexes are also required by their licences to broadcast from specific locations, at given frequencies. Ofcom expects to issue to channels 3, 4 and Five, digital replacement licences (“DRLs”) in late 2004¹⁶. Ofcom plans to insert in the DRLs obligations to help achieve digital switchover, including a requirement to broadcast from certain sites at specific powers in order to achieve at switchover a level of digital coverage at least substantially the same as that achieved under the current analogue licences. As digital television broadcasts are presently transmitted from 80 sites, such an extension would entail decommissioning and replacing analogue equipment at many more locations (analogue is presently transmitted from 1,154 sites) which would be a significant investment and major engineering

¹⁵ As outlined in the September Consultation document (3.18), radio broadcasters and Restricted Service Licence holders also use terrestrial transmission, but account for a proportionately much lower element of revenues received by ntl and Crown Castle.

¹⁶ Ofcom’s September 2004 consultation document “Digital replacement licences to be offered to channels 3, 4, 5 and the public teletext service” refers;
<http://www.ofcom.org.uk/consultations/past/drl/?a=87101>

undertaking. Such specifications are necessary in order to ensure interference-free nationwide coverage and efficient use of spectrum.

- 3.32 In addition, where a television broadcaster has been transmitting from a particular location, all its viewers will have their aerials pointing in that direction, and changing to an alternative, even were it permissible, could be very disruptive for viewers who might have to adjust their antennae.
- 3.33 There are similar constraints on the options available to radio broadcasters: although there are not explicit locations specified in radio licensing, in practice many radio licences may only be fulfilled by using a particular mast or site (or in some cases, a choice of one of two suitable masts). This is because:
- For particular frequencies served by radio broadcasters, only particular masts or sites may be suitable;
 - In order to serve large and profitable audiences, broadcasters are constrained to use sites that can provide them such coverage;
 - The lack of alternative sites at particular locations means that only existing sites can be used and there are planning and cost barriers to entry which would make erecting a new mast very difficult or impossible;
 - Due to the limited availability of spectrum, they cannot choose to expand their usage of sites (e.g. it is difficult to use an alternative location as it may conflict with other adjacent broadcasts);
 - Transmission of certain frequencies from specific sites will have been cleared internationally for use, and use of a new site might mean repeating that process, which would have time and cost implications.
- 3.34 Thus the choices available to radio broadcasters in certain circumstances may be, in fact, no greater than those available to television broadcasters. In particular this is an important consequence of seeking to make the most efficient use of spectrum.

National, regional, metropolitan and local broadcasting

National broadcasting

- 3.35 To achieve national coverage, ntl and Crown Castle are required by existing regulation (contained in the continuation notices referred to at 2.12) to share sites for transmission. For terrestrial transmission of television and national radio content, all broadcasters presently purchase an MTS (described below) from ntl and Crown Castle, whereby ntl and Crown Castle are contracted to take the broadcasters' content and ensure that it is fed to the antennae on the masts and thence transmitted to viewers and listeners. In the case of television, 1,154 sites are used for national broadcasting in order to ensure that nearly all of the UK can be reached with good quality signals. Thus Ofcom proposes not to disaggregate sites for television broadcasting: although the sites used may vary in signal strength and other characteristics, they are all significant for broadcasters to achieve coverage. As noted at 3.30 above, under the present regulatory regime and that envisaged under the DRLs the terrestrial broadcasters are required to use the specified mast and site network in order to fulfil their present and future obligations. Although Five does not transmit from all these sites, it retains obligations to transmit from a specified, lower number of sites to fulfil its licence obligations and thus its needs will also be regarded as "national" for the purposes of this analysis.

- 3.36 For national radio the situation is different. A national radio broadcast can be secured by using a lower number of sites, due to the different propagation characteristics of radio and its power levels. For commercial radio, there is one FM broadcaster (Classic FM) and two AM ones (talkSPORT and Virgin). In addition the BBC has five national broadcast services between, FM and AM (BBC 1-5). National commercial FM broadcasts are transmitted from a total of 32 main sites; fifteen of which are operated by Crown Castle, nine by ntl and eight are independent. There are two national digital radio multiplexes: the BBC's and the commercial national multiplex, Digital One.

Metropolitan and regional broadcasting

- 3.37 Metropolitan and regional broadcasting (and indeed local) is dominated by radio. There is a very limited number of local television licensees and some of them are for limited periods, so that their presence is unlikely to affect the conclusions in this document.
- 3.38 "Sub-national" radio broadcasting is formally licensed as "local" but this is not in practice particularly helpful for the purposes of this analysis as it does not take account of the very major characteristics of a small licensee with under ten thousand rural listeners versus the several millions who may be served in a conurbation. Ofcom has taken the view that to subdivide the market into "metropolitan and regional" on the one hand and "local" on the other will aid consideration of the different competitive conditions which those customers experience.
- 3.39 Ofcom considers that useful proxies for distinguishing between different types of radio broadcasting are transmission power and the audience measure known as "MCA" (measured coverage area). Metropolitan stations serve over 200,000 adults and/or have main transmitters with power over 500 watts. Smaller "local" stations serve less than 200,000 adults, and/or with transmitter power up to 500 watts. Ofcom also considers it useful to make these distinctions on the basis of FM broadcasting as it is the radio service with the highest number of end users, although similar distinctions may be made with regard to digital (DAB) radio.

The characteristic transmission needs of national, regional, metropolitan and local broadcasters

- 3.40 The major distinction between these different types of broadcaster leads from their transmission needs:
- 3.40.1. National, regional and metropolitan broadcasters are likely to need to transmit from tall purpose-built transmission masts. This results from the need either to propagate the signal over a wide area or because reception of a signal transmitted from a low vantage point would be poor in an urban environment;
- 3.40.2. National, regional and metropolitan broadcasters will tend to use higher power transmissions in order to serve their audience. This requires both a specialised workforce to handle this equipment and power levels and the equipment itself and its installation and maintenance will tend to be more expensive owing to this specialisation, and indeed other factors like the skills and equipment needed to rig and work with higher installations high off the ground;

3.40.3. A national, regional or metropolitan broadcaster may need to broadcast from more than one location (for a national, this may be very many). To provide this transmission and its ongoing maintenance, a broadcaster will ideally seek to contract with one company, for convenience and consistency of quality. This will tend to reduce the number of service providers who can offer a credible service to such broadcasters;

3.40.4. National, regional or metropolitan broadcasting is also likely to have greater start-up and ongoing costs associated. The basic equipment is more expensive and sophisticated, its installation may be more specialised (e.g. at height where standard cranes may not reach), the power needs are higher and the equipment may need more frequent replacement and maintenance owing to higher power stress.

The sites used by different broadcasters

- 3.41 For metropolitan and regional terrestrial radio transmission, the overwhelming majority of the masts and sites for analogue and digital transmission are operated by ntl or Crown Castle; who generally use the same masts to provide both television and radio terrestrial transmission. In some cases, there may be some degree of substitutability between ntl and Crown Castle masts, particularly for some metropolitan transmissions where both companies may each have masts which are capable of achieving coverage over the metropolitan area. And some medium-scale licences covering larger metropolitan areas (e.g. Birmingham, Manchester) may have some very limited substitutability beyond these two companies.
- 3.42 But in general, experience indicates that there are unlikely to be alternative providers to either ntl or Crown Castle. This is due to the fact that to cover many regional and metropolitan areas it is necessary to broadcast from an antenna at a particular location in order to have the necessary antenna height to achieve the required range or coverage. In general, increased transmission power does not provide a proportionate remedy for a lack of height, and a higher-power /lower height solution would attract a disproportionate penalty in terms of interference to other services. In general a station with transmission output of or exceeding 2kW e.r.p. (effective radiated power) per plane of polarisation will find it difficult to substitute to a non-purpose built alternative. Its height requirement is most likely to be achievable using a purpose-built broadcast transmission mast such as those operated by ntl and/or Crown Castle. The location and height of the mast contributes to making the most efficient use of the allocated spectrum.
- 3.43 Some radio transmission can also be provided from independently owned masts and sites, as for example from a tall building. This is particularly true for radio transmissions serving local areas. However, the percentage by revenue of independent sites serving the commercial radio transmission market is estimated to be less than 20%. For the reasons explained above, radio transmission for national broadcasters who have the highest share of revenues, can only be possibly provided using the masts and sites operated by ntl and Crown Castle which underlines their importance in provision of the network for radio broadcasting.
- 3.44 The importance of using specific, broadcasting sites for national, regional and metropolitan broadcasting may be illustrated by examining the situation with commercial FM radio broadcasting.

- 3.45 The following table outlines the situation with 420 FM transmitter locations. Of the 314 main FM transmitters serving UK commercial radio listeners, 64 are on Crown Castle sites, 71 on ntl's and 197 on third-party sites. The situation varies significantly between those sites used by national, regional and metropolitan broadcasters and local broadcasters:

| CATEGORY OF STATION | NUMBER OF LICENSEES | TOTAL MCA (ADULTS) | CROWN CASTLE SITES | NTL SITES | THIRD-PARTY SITES | TOTAL SITES |
|---------------------|---------------------|--------------------|--------------------|-----------|-------------------|-------------|
| National | 1 | 48m | 15 | 9 | 8 | 32 |
| Regional | 16 | 20m | 8 | 14 | 6 | 28 |
| Metropolitan | 49 | 35m | 16 | 25 | 8 | 49 |
| N/M/R total | 66 | - | 39 | 48 | 22 | 109 |
| | | | | | | |
| Local | 205 | - | 25 | 23 | 157 | 205 |
| | | | | | | |
| Main Sites | 271 | 48m | 64 | 71 | 179 | 314 |

- 3.46 The major feature of this analysis is that 80% of the masts used by national, regional and metropolitan FM broadcasters are provided by ntl and Crown Castle – i.e. this illustrates that those broadcasters tend to need large facilities which will tend to be those acquired, constructed or installed for the purpose of national, regional and metropolitan broadcasting. These broadcasters serve the largest number of listeners and consequently attract the highest revenues. Amongst 'local' FM broadcasters, only 23% use ntl or Crown Castle sites. Annex 7 provides a list which indicates some of the most commercially significant sites and their operators for national, regional and metropolitan FM radio broadcasting. This list is not exhaustive and is subject to change owing to changes in transmission practices over time.
- 3.47 106 further local sites are considered to be relay stations. They tend to be lower, powered, serve small populations and are less likely to be ntl or Crown Castle sites. Among the relay stations, 25 are ntl, 25 Crown Castle and 56 other.

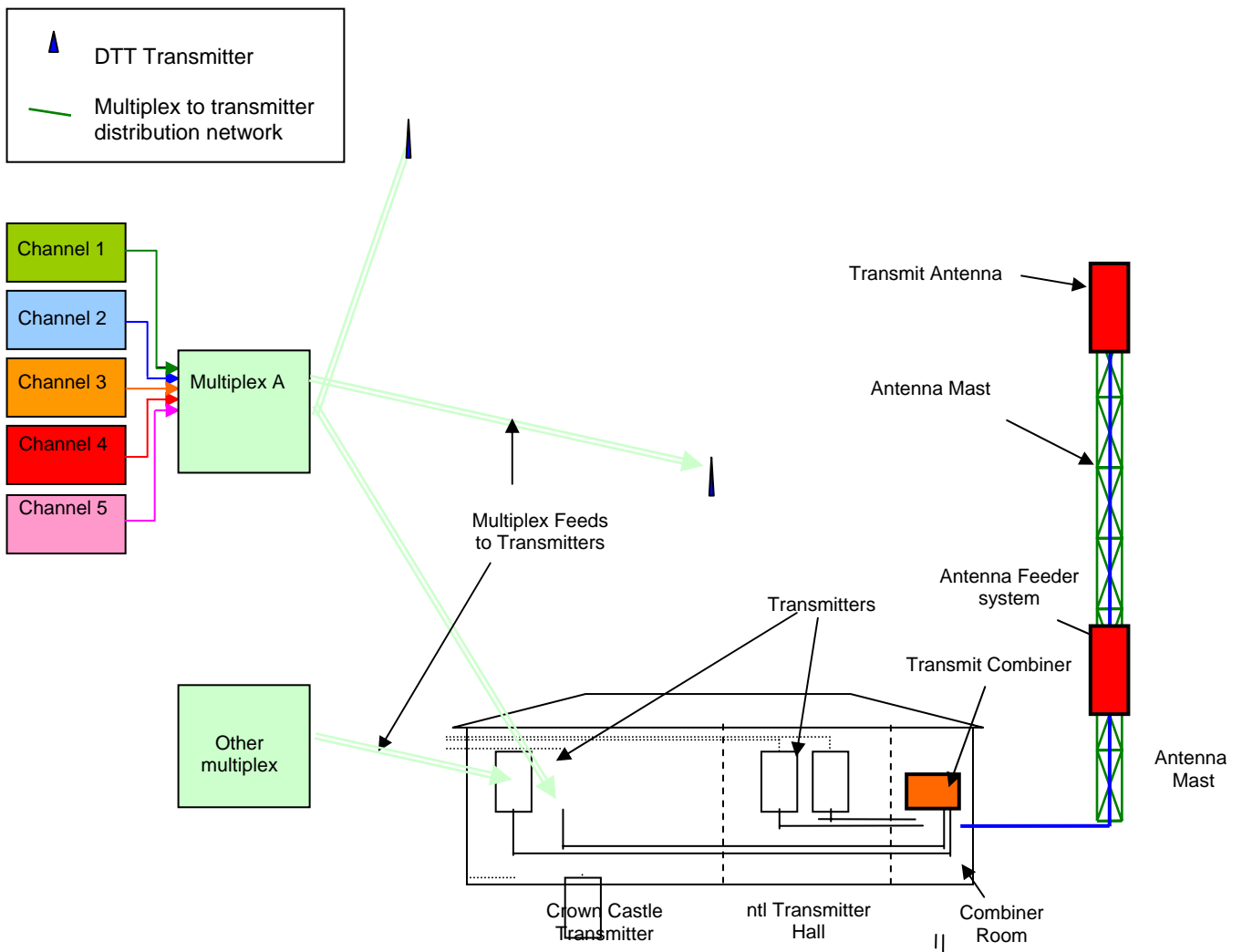
The value chain for terrestrial broadcasting transmission

- 3.48 The provision of terrestrial broadcasting transmission services in the UK may be explained by splitting into layers. The downstream layer is the retail provision of broadcast content to end-users (viewers and listeners) – i.e. what viewers and listeners receive through aerials, or through digital set-top boxes attached to their television sets.
- 3.49 In order to provide terrestrial transmission broadcasting services to deliver content to end-users, there are further upstream layers in the value chain. Analogue television broadcasters purchase transmission from suppliers of Managed Transmission Services ("MTS"). For digital television however, broadcasters are supplied with transmission as part of the package of

services they obtain on securing access to a digital multiplex. In turn, the multiplex licensee purchases MTS from an MTS provider. The situation is similar in radio, except that local, metropolitan and regional radio broadcasters sometimes self-supply transmission.

- 3.50 MTS providers take responsibility for a broadcast stream arriving at a transmission site and make 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 maintenance of the transmission equipment.
- 3.51 The transmission site may be operated by the MTS provider or another party (e.g. ntl may operate a site from which Crown Castle provide MTS). As noted above, there are some smaller sites that are independently owned and operated, usually for smaller equipment used for local broadcasting. Typically, the site operator is responsible for provision of space to establish a building, or maintenance of buildings, facilitation of power and other essential services where the sharer is hosted within the host's own accommodation. Transmission is often effected using equipment, in particular a combiner, feeder and antenna shared between several analogue broadcast channels or digital multiplexes. If this is the case, the site operator will typically be responsible for installation, operation and maintenance of the shared equipment, normally working closely with the MTS provider on such shared equipment.
- 3.52 In relation to access to masts and sites for radio broadcasting, again ntl and Crown Castle purchase wholesale reciprocal access to each others' masts and sites for the purposes of supplying MTS, but other parties are also involved in the provision of MTS for radio, either through self-provision of access by radio broadcasters or via independent third parties.
- 3.53 Linked to these activities is the distribution of content from broadcast studios to the masts and sites themselves. This may be arranged by the MTS provider but Ofcom does not propose to examine this service in this review, for the reasons discussed at 2.17.
- 3.54 Provided below is an illustration of the different levels of the transmission process.

Figure 1: Digital Terrestrial Television Transmission



3.55 On the left of this diagram, the television content can be seen being distributed from broadcasters' studios to the multiplex licensee. The multiplex licensee combines (i.e. "multiplexes") the different streams of broadcast content into a single digital bitstream from whence it is sent to the mast site to be combined with streams from other multiplexers and transmitted to the home receiver. The process of site sharing can be seen above: in this example ntl own the transmitter hall and Crown Castle has its own room in which its signals are received. The signals are then all sent to the transmit combiner and then sent up the feeder system to the antenna. The use of a combiner allows fewer antennae to be installed on the mast, which may be necessary where a mast has limited capacity. The difference in the case of analogue broadcasting is that there is no multiplex intermediary: broadcast content is sent straight from the studio to the mast site.

Market definition

- 3.56 This section undertakes an analysis to define the relevant markets for the above products based on the methodology described in paragraphs 3.2 to 3.16.
- 3.57 The market definition which is proposed in this section is based on the evidence available to Ofcom and takes account of comments made in the first stage of consultation which closed on 10 November 2003. Annex 3 lists those organisations that responded to that consultation exercise.

RETAIL MARKETS

The retail market for broadcast content to end-users

Retail market for television and radio broadcast content

- 3.58 This section undertakes the market definition analysis by questioning whether, at the retail level; content broadcast from television is part of the same market as content broadcast from radio.
- 3.59 It is unlikely that end-users would see terrestrial television and radio as adequate demand side substitutes in the event of a hypothetical monopolist of either television or radio broadcaster raising prices above the competitive level. This is because the content, experience and attributes of the two media are very different and a substitution to the other form of broadcasting is unlikely to meet the requirements of a radio listener or a television viewer. Supply side substitution from terrestrial television to radio may be limited, as the supplier of television content would not only need to obtain a license for radio content, thereby having to be allocated some spectrum, but would also need to purchase the appropriate wholesale input such as terrestrial radio transmission. This is likely to impose additional costs on the broadcaster. Supply side substitution from terrestrial radio to television would carry a significant cost as the supplier would have to convert an audio content to an audio-visual content and purchase an MTS for television to be able to supply into the television market. Hence radio and television content broadcast by terrestrial transmission can be regarded as separate markets at the retail level.

Retail market for digital and analogue content

- 3.60 This section undertakes the market definition by questioning whether, at the retail level, digital content is part of the same market as analogue content.
- 3.61 All end-users who own a radio or television can receive analogue content broadcast by terrestrial transmission. However, only those who own a digital radio or television, or who have a digital terrestrial television set-top box can receive digital broadcasts. Users of colour television currently pay an annual licence fee of £121¹⁷ to be able to view/listen to analogue content through television. Digital set-top adaptor boxes for television are available from under £40, and digital radios are available from around £50. In addition, those seeking to receive digital content are likely to have a preference for

¹⁷ http://www.tvlicensing.co.uk/index_frameset.html

multi-channel viewing. It is due to these advantages that some customers may have a higher willingness to pay and might switch to digital. In such a situation, they are unlikely to provide any constraint on the providers of analogue content. Also, those who switch to digital television need to continue to pay the licence fee: hence substitution based on increasing the licence fee is not relevant. For commercial television, advertisers might switch to alternative routes to market but there is no evidence to suggest how much of an increase that market might bear. Any reduction in programming spend would affect all television platforms and both analogue and digital transmission as they all carry the same PSB channels. Thus the effect of a rise in the analogue transmission price cannot be ameliorated by viewer or advertiser switching.

3.62 However, digital radio presently provides a more limited degree of multi-channel listening. While digital radio is making significant inroads into some locations (e.g. 67% by value of 'kitchen-style' sets sold are now digital¹⁸), until it achieves a comparable ubiquity to analogue radio, it is unlikely that analogue and digital radio will be full demand side substitutes.

3.63 On the supply side, there is limited supply side substitutability – in the event of a price rise from a hypothetical monopolist in terrestrial retail digital television or radio broadcasting, those providing terrestrial analogue television or radio content and intending to supply side substitute to provide terrestrial digital content need to purchase MTS for digital broadcasting. MTS for digital broadcasting is provided through digital multiplexes and uses different equipment and power levels to analogue services. Currently, many of the local radio services cannot substitute to provide digital content to viewers because the costs would be significant in relation to the profitability from a limited end-user base. In television, analogue broadcasters would need to invest in the supply of set-top boxes that can provide the digital content. The cost of doing so is significant (at least £40 per household per box, with potential aerial upgrades as well) and hence limits the extent of supply side substitution from analogue to digital content broadcast by terrestrial transmission. Those providers of digital terrestrial broadcasting who are already present in the service of analogue terrestrial broadcasting (for example, the PSBs) cannot exert any additional constraint on a hypothetical monopolist in analogue terrestrial broadcasting for television or radio. Those television or radio broadcasters who currently only provide digital channels are restricted from providing analogue services due to the limited amount of spectrum available for analogue. Hence Ofcom considers that there can be no effective supply side substitution from digital broadcasters into analogue broadcasting.

3.64 The above discussion indicates that while there may be separate retail markets for analogue and digital television content, the case is less clear for analogue and digital radio. For the present, Ofcom does not believe that a conclusion on the relevant retail markets is very significant, because, as discussed below at 3.97 – 3.103, the definition of the wholesale markets is informed by, but not entirely determined by the market definition at the retail level.

Proposed view on the retail market for broadcast of content to end-users

¹⁸ "Digital radio turns up the volume" Guardian, 14 June 2004

3.65 Ofcom considers that the following markets may exist at the retail level:

- Analogue television content broadcast to end-users by terrestrial transmission
- Analogue radio content broadcast to end-users by terrestrial transmission
- Digital television content broadcast to end-users by terrestrial transmission
- Digital radio content broadcast to end-users by terrestrial transmission

INTERMEDIATE MARKETS

The markets for managed transmission services

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

- 3.66 This section undertakes the market definition analysis by questioning if the provision of MTS to radio broadcasters is part of the same market as the provision of MTS to television broadcasters.
- 3.67 On the demand side, if a terrestrial radio broadcaster faced a 10% price rise from its supplier of MTS for terrestrial radio broadcasting, it would not find MTS for television broadcasting to be an effective demand side substitute. This is because a MTS for television uses a different technology (transmitters, power levels etc.) that will not provide the radio broadcaster with the service he requires to be able to provide radio content to end-users. Additionally, the costs faced would be much higher – the cost of television transmission is a significant multiple of that for radio (up to 10 times). Further, in order to be able to use a managed transmission service for terrestrial television broadcasting, the broadcaster would need to have the availability of a different, more extensive quantity of spectrum than that required for radio broadcasting (television broadcasting requires a lot more spectrum than radio) and the licence to use that spectrum. Self-provision by radio broadcasters cannot provide a constraint because such self-provision of television MTS would require skills and expertise (given the technological differences mentioned above) which radio broadcasters would find costly to acquire within a period relevant for purposes of the SSNIP test.
- 3.68 Similarly, a television broadcaster faced with a price rise from a hypothetical monopolist of MTS is not likely to find radio MTS adequate for the purposes of delivering audio-visual content to their end-users – television viewers expect television content and would not (nor would advertisers) find radio an adequate substitute.
- 3.69 On the supply side, there is currently no provider of MTS for terrestrial television who does not also provide MTS for radio. Both ntl and Crown Castle, who are presently the only suppliers of MTS for television broadcasting, also provide MTS for radio. Any competitive constraint they may exert on a hypothetical monopolist in MTS for radio broadcasting is already considered on the demand side and hence they cannot exert any additional constraint on the monopolist's potential ability to raise prices above the competitive level.
- 3.70 There are however providers of MTS for radio who do not provide such a

service for the purposes of television broadcasting, and this raises the question of whether supply side substitution can take place from such providers into MTS for television. But in order to do so, such independent providers of MTS for radio who are currently providing regional, metropolitan and local MTS would need to reconfigure their equipment (or acquire new) to be able to transmit to the required frequency for television transmission. They may also need to retrain to gain the necessary key competences for television. This is likely to involve a significant cost and is unlikely to be achievable within the timeframe for demand side substitution. Importantly, they would need to have the necessary scale and reach to be able to effectively supply side substitute – i.e. they would need to have access to many more transmission sites and masts than they currently do in order to provide a MTS that can meet the specific broadcasting coverage requirements of PSBs and the commercial multiplex licensees. In the absence of any regulated access to the whole network of masts and sites of ntl and Crown Castle other access providers, there is unlikely to be any supply side substitution from MTS from local, metropolitan and regional radio such that it undermines a profitable price rise by a hypothetical monopolist in MTS for television.

- 3.71 Hence Ofcom considers that the provision of MTS to local, metropolitan and regional broadcasters is in a separate market to the provision of MTS to national broadcasters.
- 3.72 On a national level there are economies of scope in using the same sites and sometimes the same masts for both national radio and national television MTS, as a national field force can conveniently provide services for both radio and television irrespective of whether the radio and television masts are actually the same or near to one another. Thus it can be argued that the same provider will choose to provide an MTS for both national television and national radio broadcasting. Therefore, any competitive constraint that may act on a hypothetical monopolist of sites used for national radio and television broadcasts will have to come from a provider offering a similar cluster of services.
- 3.73 Hence Ofcom considers that MTS for national television broadcasting can be considered to be part of the same market as MTS for national radio broadcasting.

Managed transmission services for local, metropolitan and regional radio broadcasting

- 3.74 On the demand side, a broadcaster purchasing an MTS for local radio will not be able to substitute to an MTS service for metropolitan and regional broadcasting. Similarly demand side substitution possibilities do not exist for metropolitan and regional MTS. A radio broadcaster is licensed for the particular area it needs to serve and cannot change to an alternative unless it gives up its licence and bids for another.
- 3.75 On the supply side, it is likely that in the event of a hypothetical monopolist in local or metropolitan radio raising prices above the competitive level, a provider of regional MTS will be able to supply side substitute reasonably quickly. Although revenues accruing from a local radio station may not be high, the costs of equipment and its maintenance and general running costs are also likely to be low. It is likely that supply-side substitution is likely

between metropolitan, regional and local MTS and this is exhibited by the presence of common firms in each of these situations.

- 3.76 Ofcom is therefore of the view that there is a common product market for local, metropolitan and regional MTS for the purposes of broadcasting. Indeed, in practice, several firms operate in all of these segments.

Analogue and digital managed transmission services for terrestrial broadcasting

- 3.77 The main customers for MTS are the PSBs and multiplex licensees for television, and for radio, the BBC, radio licensees and multiplex licensees. These broadcasters must fulfil their obligations to provide terrestrial transmission broadcasts to viewers, using terrestrial analogue and digital means of delivering content to end-users and hence analogue and digital (and therefore the provision of analogue and digital MTS) cannot be considered as demand side substitutes. The multiplex licensees cannot move into purchasing analogue MTS in the event of a hypothetical monopolist increasing prices for digital MTS because their licences do not permit them to do so. In a similar way, radio licensees have specific needs in order to serve their geographical target audience through an analogue or digital MTS as required by their licences and hence the two types of MTS cannot be considered as demand side substitutes.
- 3.78 There may be supply-side substitution for MTS between analogue and digital MTS providers. Some similar equipment (if not the same) may be used, and similar competences in terms of installation and maintenance are likely to be valuable. There may also be the scope for supply-side substitution for certain elements of managed transmission from alternative providers (e.g. aspects of maintenance and installation might be capable of being performed by general construction engineers). Any such substitution would fall short of the entire MTS offering.
- 3.79 However, in television and national radio MTS, the only suppliers of digital MTS are those already materially present in the provision of analogue MTS. Hence they cannot provide an effective supply side constraint.
- 3.80 Nevertheless, it can be argued that site access provides economies of scope because it allows anybody owning or accessing a site to provide both analogue and digital MTS. Therefore an MTS supplier is likely to exploit these economies of scope by providing both analogue and digital MTS. If the same sites and masts are shared between digital and analogue MTS suppliers, this will enable the supplier to offer a more competitive price than if they were only providing an analogue service. Broadcasters are likely to choose suppliers or providers who can offer them the most competitive prices for transmission, whether analogue or digital.
- 3.81 Ofcom is of the view that the provision of a cluster of services using the same sites can indicate that analogue and digital MTS are part of the same market. Therefore Ofcom is of the view that digital and analogue MTS are part of the same intermediate market.

Proposed product market definition

- 3.82 Ofcom is therefore of the view that there are separate product markets for:

- the provision of terrestrial managed transmission service for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver a national broadcast service;
- the provision of terrestrial managed transmission service for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver other than a national broadcast service.

Geographic markets

- 3.83 In addition to the products to be included within a market, market definition also requires the geographic extent of the market to be specified. The geographic market is the area within which demand side and/or supply side substitution can take place and is defined using a similar approach to that used to define the product market. Ofcom has considered the geographic extent of each relevant market covered in its market review consultative documents.
- 3.84 There are a number of possible approaches to geographic market definition. One approach would be to begin 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 operators outside the area to begin to offer services in the area (supply-side substitution). If supply and/or demand side substitution is sufficient to constrain prices then it is appropriate to expand the geographic market boundary.
- 3.85 Ofcom recognises that in certain communications (product) markets in the UK, there could be different competitive pressures in different geographic areas. In these circumstances it might be possible to identify separate geographic markets for some services. However, a number of difficulties would then arise. In particular, the definition of separate geographic markets using the hypothetical monopolist test as outlined above would likely lead to a proliferation of markets. This, when considered along with the dynamic nature of communications markets, could easily mean that the boundary between areas where there are different competitive pressures would be unstable and change over time, rendering the market definition obsolete. It is not clear that determining ex-ante where the boundary would be is an exercise that could be carried out with any degree of accuracy.
- 3.86 In such cases, because of the difficulties associated with defining separate geographic areas, there is a risk that inappropriate decisions would be made about the imposition or removal of regulations, which could be detrimental to consumers and competition. On balance, such a detailed approach may well not add significant benefit to the regulatory outcome being proposed.
- 3.87 When faced with the problem of proliferation and instability described above, 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 may have local geographical characteristics. If such characteristics have a significant effect, they can be taken into account in framing any appropriate remedies.

Geographic markets for managed transmission services for the purpose of analogue and digital national television and national radio terrestrial broadcasting

- 3.88 National MTS for analogue and digital television and radio broadcasting is currently purchased as a national or composite service rather than on a site-by-site basis. This makes it a simpler method of procuring the service rather than on an individualised basis. Individual site-by-site purchasing offers no particular advantage because the broadcaster purchasing national MTS would find it technically efficient to purchase the service from a single provider.
- 3.89 National MTS for digital and analogue television and radio broadcasting have the same two providers supplying transmission using the mast and site network as the major input at the upstream level of access to sites and masts. Ntl and Crown Castle, in addition to owning the sites and masts, provide an MTS through access to their own sites and masts and by sharing the sites and masts of the other. This reciprocal access to each others' masts and sites enables ntl and Crown Castle to provide an MTS to their respective analogue customers that can achieve full UK-wide transmission coverage. The MTS market does not exhibit different competitive conditions between the offering of services at the different sites, owing to the practice of reciprocal site sharing.
- 3.90 MTS for the purposes of digital terrestrial television broadcasting is currently only available from 80 sites as the nationwide digital rollout (i.e. for full national coverage) is not yet complete. Therefore the coverage provided is less than by analogue broadcasting. In a similar way there is incomplete coverage for digital radio transmission, with different broadcasters making different commitments in terms of coverage and rollout over time. This raises the issue of what the likely extent of the geographical market is for MTS for the purposes of digital television broadcasting. Ofcom is of the view that defining sub-national boundaries for digital television MTS is not appropriate as there are homogenous competitive conditions and a tendency for transmission services to be bought as a cluster. In addition, defining local or regional boundaries for MTS is also inappropriate as there is a degree of boundary instability because of the government plans for complete digital television switchover (currently planned to be in 2012), and commercial plans to increase digital radio coverage, which imply that digital transmission is likely to grow rapidly over the next few years. The rollout will mean that new areas will have to be incorporated into the market definition in a relatively short time, thereby rendering a local or regional geographic market definition obsolete. In addition, as noted above, broadcasters tend to buy transmission services on a composite / national basis rather than site-by-site, and a digital transmission contract would tend to take account of the need to incorporate new sites into the existing deal when frequency planning permits, rather than the broadcasters seeking to renegotiate contracts to add in new sites on a piecemeal basis, when expansion of coverage is possible.
- 3.91 Ofcom therefore believes that it is appropriate to define the market for MTS for digital transmission on a national basis. This approach is also useful in an SMP analysis, since both the providers of MTS for digital transmission currently provide this service from a limited 80 sites, but are likely to extend this coverage to all sites to meet the demands of the digital multiplex

licensees to achieve their coverage requirements.

- 3.92 The market for the provision of terrestrial managed transmission service for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver a national broadcast service is therefore considered to be a national market.

Geographic markets for managed transmission services for the purpose of analogue and digital terrestrial local, metropolitan and regional broadcasting

- 3.93 The major local, metropolitan and regional broadcasters are in radio: there are a very limited number of “restricted service licence” holders in television, who tend to be short term, or local (or both) community based broadcasters of limited relevance to this review owing to their small scale. This section’s discussion of local, metropolitan and regional broadcasting shall be in the main illustrated by reference to radio.

- 3.94 With local, regional and metropolitan analogue and digital managed radio transmission services, there is no effective demand side substitution for broadcasters wishing to get a service covering a particular geographic area – they need to purchase a service that will cover that area. However, the situation is different with regard to supply side substitution. This substitution depends on how easily and quickly a provider of a local service in one area can switch to providing a local service in another area. There is likely to be some degree of a chain of substitution between regional, metropolitan and local broadcasters’ needs; as such broadcasters, when seeking transmission providers, are likely to be capable of being served by MTS providers who already offer MTS to other regional, local or metropolitan broadcasters. There are likely to be common competences involved and unlike national broadcasting, there is no need for an extensive field force.

- 3.95 Therefore Ofcom has chosen to adopt a national market definition in the market for MTS for the purposes of local, metropolitan and regional radio broadcasting. This is for the following reasons:

- Firstly, from the information available to Ofcom, it appears that the conditions of competition do not vary markedly across the country. In most transmission areas, service could be obtained from a range of service providers, including the two largest (Crown Castle and ntl) or (to the extent practicable) by self-supply. In such circumstances, no increase in precision of the analysis is to be expected by geographic segmentation;
- Secondly, local, metropolitan and regional radio broadcasters tend to purchase MTS for the entire group of sites from which they are transmitting in a single package, not site-by-site;
- Thirdly, it could add uncertainty to attempt to clearly identify the geographic boundaries of narrower markets, which may be highly localised;
- Finally, the sheer number of possible localised markets suggests that such an exercise is impractical. When considered along with the dynamic nature of radio markets (especially in view of growing digital services), it would most likely mean that the boundary between areas where there are

different competitive pressures would be unstable and change over time, rendering the market definition obsolete. It is not clear that determining *ex ante* where the boundary would be is an exercise that could be carried out with any degree of accuracy.

- 3.96 For these reasons, Ofcom considers that the geographic market for the provision of terrestrial managed transmission service for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver other than a national broadcast service can be considered to be national.

WHOLESALE MARKETS

Market for access to masts and sites

Access for the purpose of national terrestrial television transmission and terrestrial radio transmission

- 3.97 As discussed above under “the value chain”, the main customers for access to mast and site networks operated by ntl and Crown Castle are those companies themselves from each other, in order to provide analogue and digital MTS downstream. On the demand side, ntl and Crown Castle may not, owing to the derived demand resulting from their customers’ (i.e. the broadcasters) obligations, substitute to another transmission platform at the upstream market level. The potential for ntl and Crown Castle to switch is therefore limited and would not constrain the pricing of a hypothetical monopolist in the market for access to masts and sites. As all terrestrial television customers for MTS have similar requirements with regards to obligations, any provider of television MTS needs to be able to access masts and sites and may not substitute to alternatives if they wish to provide that service. National radio broadcasters have similar constraints.

Access to sites for national, regional and metropolitan transmission

- 3.98 There are similar constraints with regard to demand-side substitution in relation to accessing masts and sites for the purposes of terrestrial radio broadcasting for national, regional and metropolitan areas. For many radio licences, the ability of radio broadcasters to switch the sites from which they can transmit may be very limited. Thus the licence obligations may only be in practice secured by using all nationally available current masts and sites. Thus a provider of radio MTS would be faced with a certain number of broadcaster requirements that may only be met through accessing all sites nationally or regionally.
- 3.99 The key issue in this respect is likely to be the size of the mast and the power required for the transmission: as discussed above a high powered transmission will tend to need to transmit from a significant height in order to cover the required area while remaining within spectrum constraints. These will tend to be best achieved by using the tall, purpose-built transmission masts and towers which are operated by ntl and Crown Castle and which have been acquired, constructed or installed for the purpose of national, regional and metropolitan broadcasting.
- 3.100 There is scope for supply-side substitution at the upstream level of access to masts and sites as between the provision of access to the masts and sites for

analogue and digital transmission of broadcast content and for both radio and television transmission of broadcast content. This is because masts and sites are generally common inputs across both radio and television MTS. However, supply side substitution from the owners of sites that are not currently used for television or radio broadcasting (for example telecommunications transmission) is in practice very difficult. This is because only particular sites and masts are suitable for television transmission – particularly due to height and location requirements. In addition, a supply side substitution would need to have alternative sites available throughout the country. This would be difficult given the planning constraints upon installing masts throughout the country (particularly if an existing mast were nearby already) and of securing a site which was in a suitable location for television viewers in particular, whose aerials will be pointing towards the mast of their existing transmitter. Supply side substitution by others from other sites is therefore unlikely to be feasible and would not therefore exercise a constraint on the ability of a hypothetical monopolist to raise prices above the competitive level.

Access to sites for other masts and sites

- 3.101 Several local radio broadcasters use independent sites such as tall buildings or masts operated by other parties (e.g. utilities, public services) for transmission. A local¹⁹ broadcaster already using sites, when faced with a price rise by a hypothetical monopolist above the competitive level might be able to secure access to similar alternative sites (where available – which is very likely as local transmission does not need to be from such a high vantage as other forms of transmission) without requiring a cost based access to the sites used for national radio and television broadcasting transmission. The sites for which local broadcasters are likely to find alternatives are those which are likely to be below 50m in height and which carry transmissions below 2kW e.r.p. These are the sites which will not primarily have been acquired, constructed or installed for the purpose of provision of national, regional and metropolitan terrestrial broadcasting transmission and although they may be used for broadcasting (amongst other things in many cases) they are likely to have alternative substitutes. Below those heights and power levels, substitutability is likely to be greater from alternative providers.
- 3.102 On the supply side too, should there be sufficient alternative sites in the close vicinity, access to those sites for the purposes of local broadcasting is likely to be easily made available. Ofcom notes that masts owned by other parties such as utilities and public services are also used for local broadcasting.
- 3.103 Ofcom is therefore of the view that competitive conditions in the market for sites used for local broadcasting are different to those used for other types of broadcasting. The market for access to sites for local transmission is therefore separate from the market for access to sites for the purpose of national, regional and metropolitan broadcasting transmission.

Proposed product market definition

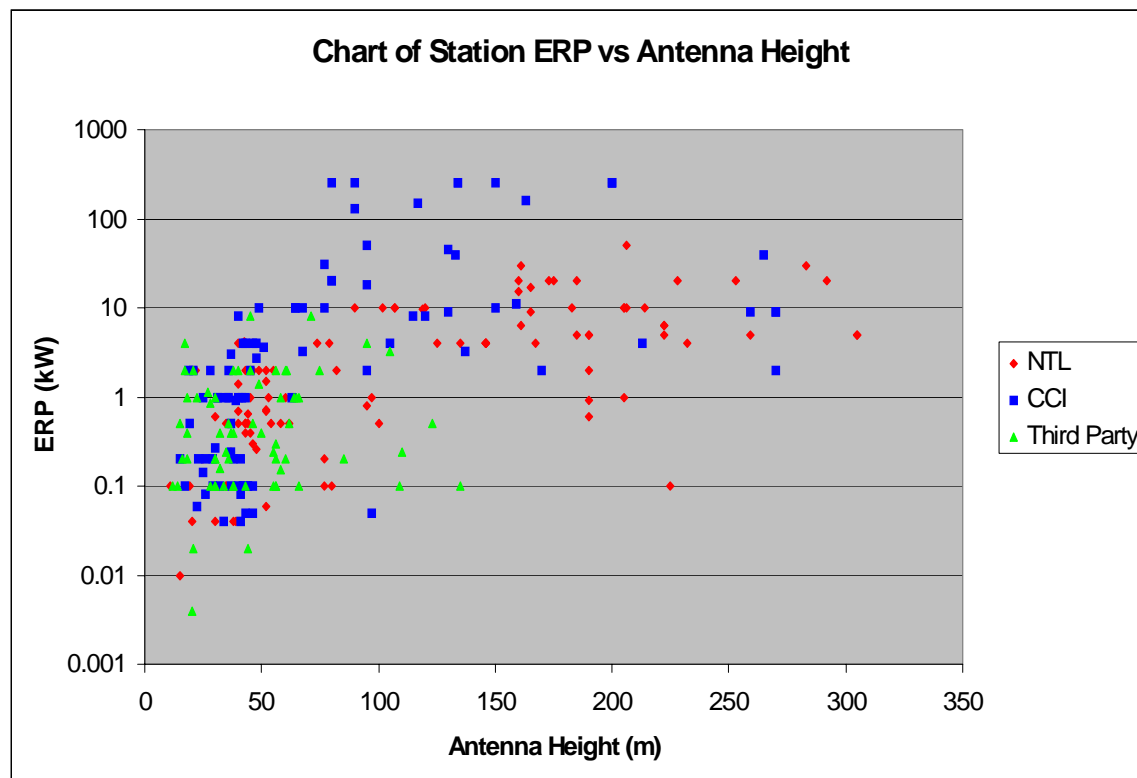
- 3.104 For national, regional and metropolitan broadcasters, there is in practice no possibility of demand-side substitution between analogue and digital

¹⁹ i.e. one which is not national, regional or metropolitan

terrestrial transmission for radio and television broadcasting. Although access to different types of broadcasting may not be substitutes on the demand side, all access is typically provided by a single provider. This is because suppliers of access will seek to exploit the economies of scale and scope by providing access for analogue and digital transmission, both to television and (often) radio broadcasters. This suggests that competing providers of access will have to compete for customers rather than in relation to particular services per customer. This distinction implies that providers of access would compete to provide a range of access services to a customer rather than offering only limited services to many customers. Such competition means that customers choose the access provider who can provide the range of services at the lowest price. The fact that access services are provided as a cluster of a range of services suggests that all access services should be treated as part of the same wholesale market.

- 3.105 As noted in 3.40 – 3.47, a large number of sites are either not substitutable by others (at least from the point of view of certain broadcasters) or may have only one plausible substitute. For other sites, or for other broadcasters, there may be a number of alternatives. Ofcom considers that the notion of whether the site was developed for the purpose of national, regional or metropolitan transmission is a useful one for the purposes of market definition. That is to say, either the site was acquired or constructed for that purpose or a mast was subsequently installed for that purpose.
- 3.106 On the basis of the analysis above, sites which were so developed will be substitutable only to a very limited degree, if at all. Ofcom considers that all sites used for national television transmission and those non-television sites where there is radio broadcasting transmission at or above a power level of 2kW e.r.p. fall within this category. As the chart at figure 2 illustrates, the corresponding masts are primarily over 50m in height, consistent with purpose-built structures for which there are few if any plausible substitutes.
- 3.107 As also noted, other sites are used for transmission, notably by local broadcasters but also for infill within larger transmission areas. Typically, these operate at low power, usually well below the threshold of 2kW e.r.p. Normally, these do not require purpose-developed sites and are readily substitutable by other sites.

Figure 2



3.108 Ofcom therefore defines the following product markets at the wholesale level:

- The provision of access to the mast and site network and shared or shareable antenna systems acquired, constructed or installed for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver broadcast content to end users on a national, regional or metropolitan basis;
- The provision of access to other masts, sites and shared or shareable antenna systems used for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver broadcast content to end users.

Geographic markets for access to masts and sites for the purpose of transmission

3.109 As noted above, the access market for masts and sites is influenced by the need of the purchasers (providers of MTS) to secure the masts and sites that will fulfil the requirements of their customers, the different broadcasters.

3.110 For television broadcasters (all national), they are totally constrained by their obligations as to which masts and sites they may use. Thus their MTS providers are similarly constrained and there is no geographic substitute to using the Crown Castle and ntl sites as specified.

3.111 The situation is slightly different with regard to national, regional and

metropolitan radio transmission. For some sites that are commercially significant for radio Ofcom is aware that there may be pairs of local substitutes: Croydon and Crystal Palace for London; Black Hill and Kirk O'Shotts for Glasgow and wider area; Sutton Coldfield and Litchfield for Birmingham and wider area; Divis and Black Mountain for Belfast and wider area; Rowridge and Chillerton Down for Southampton and the Isle of Wight; and Caldbeck and Sandale for Carlisle, Cumbria and Dumfries and Galloway. There may therefore be opportunities for supply side substitution between Crown Castle and ntl for the provision of access to masts and sites to serve those areas, amongst others. Thus, it might be considered appropriate to identify a number of contestable local markets.

- 3.112 Ofcom is not minded to pursue this. Ofcom notes that radio transmission – particularly at the national, regional and metropolitan level tends to take place from sites at which television transmission also takes place, and in such cases the design of the sites will have been configured to meet the needs of television broadcasters. Similarly, given the greater cost of television transmission, the bulk of the income generated by such sites is likely to be from television. Ofcom notes that market definition is not an end in itself but is a tool aimed at the identification of positions of market power. Accordingly, it is of the view that the very limited degree of substitutability at such sites can be disregarded for the purpose of market definition as it would not in practice affect its views concerning significant market power.
- 3.113 The extent of the geographic market can be examined by analysing the competitive conditions in each geographic area. As discussed above, the economics of scale and scope mean that an MTS provider is likely to choose to secure a range or cluster of sites and masts to provide television and radio broadcasting. Although in some areas customers may be able to obtain access from multiple providers, the fact that access to the sites is sold in a bundle means that effectively, the choice is between the bundle offered by providers and not between individual sites in different geographic areas offered by different providers. In addition, the customers for access all have broadcast customers (radio and television) with similar requirements in terms of need to broadcast from specific locations. If a hypothetical monopolist of one site increased its prices, a company providing MTS to a broadcaster would not be able to substitute to an alternative mast owing to the broadcaster's obligations or location needs.
- 3.114 Throughout the UK there are 1,154 television broadcast masts and sites the ownership or operation of which is split broadly 50/50 between ntl and Crown Castle. Each mast on each site for analogue and digital transmission provides full coverage for its area, therefore in the relevant area, the owner of the mast (ntl or Crown Castle) has 100% market share. There is no practical overlap between the areas served by masts for television broadcasting; therefore the masts and sites of each company may be aggregated into two geographical markets. Although there is some measure of overlap between certain masts used for radio broadcasting (particularly in some regional/metropolitan areas such as for some London licence areas), as discussed at 3.109, for all practical purposes this overlap is between ntl and Crown Castle only and will only have a practical substitutability in a limited number of cases – and ntl and Crown Castle remain the major providers.
- 3.115 Although there are masts used (especially for local radio) which are not operated by ntl or Crown Castle, they tend not to be high revenue sites and

not used either for television. In the market for access to masts and sites, where Crown Castle, ntl and others purchase access in order to provide a MTS, the hypothetical monopolist test suggests each mast is in a separate market due to lack of demand- and supply side substitutes in each area. To be able to offer MTS in a certain area a company needs to have access to the relevant mast in that area. However, as access to ntl and Crown Castle sites is usually purchased in aggregate for broadcasting as a bundle with similar competitive conditions throughout (always for television), they shall be addressed here as two separate geographical markets for access to masts and sites.

3.116 As far as sites and masts used for local radio broadcasting are concerned, the analysis of the geographic market could imply that there are several localised markets between which the competitive conditions differ. However, Ofcom believes that the contours of such geographic markets may be impractical to ascertain and is unlikely to add clarity to the analysis to make such an attempt. For the reasons outlined at 3.101 – 3.103, Ofcom believes that the geographic extent of the market for local sites is national. That is, access to masts and sites used for local broadcasting transmission may be considered to be one national market.

Initial conclusions on market definition: upstream market

3.117 For the purposes of this review, Ofcom proposes to define the following markets for access to masts and sites for the purposes of broadcasting content to end users:

- The provision of access to the mast and site network and shared or shareable antenna systems acquired, constructed or installed by Crown Castle for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver broadcast content to end users on a national, regional or metropolitan basis;
- The provision of access to the mast and site network and shared or shareable antenna systems acquired, constructed or installed by ntl for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver broadcast content to end users on a national, regional or metropolitan basis.
- The provision of access to other masts, and sites and shared or shareable antenna systems used for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver broadcast content to end users on a national, regional or metropolitan basis.

Views of consultation respondents on Ofcom's market definition

3.118 Responses to the September Consultation generally concurred with the market definition outlined in that document in respect of the upstream market for access to masts and sites, which was broadly similar to the market proposed in this review – the major difference being the bringing together of radio and television and the distinction between national, regional and metropolitan and local markets. One respondent was concerned that there were not in fact two geographical markets as proposed but rather that in practice previously public sector monopolies were persisting in the private

sector. Ofcom does not agree, as it is only through the intervention of the site sharing obligation that a UK-wide service can be offered, not by either company from an unregulated starting point. Several respondents made the case that there was a market for MTS that required analysis in this market review, and those responses have been borne in mind in the definition of the MTS market in this section.

- 3.119 Several respondents to the September Consultation noted that in section 274 of the Act, there is provision that satellite may be used as the provider for digital television in hard to reach areas, and that this would change the nature of the SMP held by ntl and Crown Castle in the markets for access to masts and sites, as some measure of substitutability would be introduced in such an event. Ofcom notes that in such an event, Ofcom would need to re-examine its findings in the affected markets to establish whether regulation remained relevant and appropriate. However, given that such provision is not currently in place, and is unlikely to be in place during the timeframe of this review, Ofcom has not considered this as part of this review.
- 3.120 There was agreement that digital cable and digital satellite cannot, given the present PSB and multiplex licensee obligations, act as substitutes for digital terrestrial means of transmission.
- 3.121 Several respondents were of the view that given the nature of the UK television broadcasting transmission market and the bundling of MTS with site access, that Crown Castle's and ntl's markets actually comprised both their sites and their provision of MTS as a bundled service. Ofcom has noted this view and in section 4 the implications of this and whether there is a realistic likelihood of market entry at the level of access to masts and sites. Ofcom remains of the view that there are separate markets in relation to access to masts and sites, but notes the concerns that market entry may not emerge in the short term. This is discussed in more detail in section 4.

Forward look

- 3.122 Ofcom does not expect the market definitions for access to masts and sites and for terrestrial MTS to change over the immediate future, as broadcasters are likely to remain tied to the use of ntl and Crown Castle masts and sites by their obligations. The earliest break point which may affect the market is likely to be 2007 as that is the Government's earliest parameter for commencing digital switchover. However, as noted by the respondents to the consultation, the timing of such a review would need to be carefully selected to not introduce unhelpful uncertainty to the market at a time when the digital transmission switchover may be being rolled-out.
- 3.123 For terrestrial radio transmission, a similar situation applies in that there is a foreseeable need for radio broadcasters to use analogue transmission and, as the digital radio market develops, digital transmission. Despite the fact that digital radio is a growing sector, it seems likely that analogue radio shall continue to remain important for many listeners.

The relationship between the market reviews and Competition Act 1998, Enterprise Act 2002 and EC Competition Law investigations

- 3.124 The economic analysis carried out in this consultation document is for the

purposes of determining whether an undertaking or undertakings have SMP in relation to this market review. It is without prejudice to any economic analysis that may be carried out in relation to any investigation or decision pursuant to the Competition Act 1998, or the Enterprise Act 2002 or Articles 81 and 82 of the EC Treaty.

- 3.125 The fact that economic analysis carried out for a market review is without prejudice to future competition law investigations and decisions is recognised in Article 15(1) of the Framework Directive which provides that:

"...The recommendation shall identify ...markets ...the characteristics of which may be such as to justify the imposition of regulatory obligations ...without prejudice to markets that may be defined in specific cases under competition law..."

- 3.126 This intention is further evidenced in the European Commission's SMP guidelines²⁰, which state:

Paragraph 25 *"... Article 15(1) of the framework Directive makes clear that the market to be defined by NRAs for the purpose of ex ante regulation is without prejudice to those defined by NCAs and by the Commission in the exercise of their respective powers under competition law in specific cases."* (This is repeated in paragraph 27).

Paragraph 27: *"...Although NRAs and competition authorities, when examining the same issues in the same circumstances and with the same objectives, should in principle reach the same conclusions, it cannot be excluded that, given the differences outlined above, and in particular the broader focus of the NRAs' assessment, markets defined for the purposes of competition law and markets defined for the purpose of sector-specific regulation may not always be identical."*

Paragraph 28: *"...market definitions under the new regulatory framework, even in similar areas, may in some cases, be different from those markets defined by competition authorities."*

- 3.127 In addition, it is up to all providers to ensure that they comply with their legal obligations under all the laws applicable to the carrying out of their businesses. It is incumbent upon all providers to keep abreast of changes in the markets in which they operate, and in their position in such markets, which may result in legal obligations under the Competition Act 1998, or the Enterprise Act 2002 or Articles 81 and 82 of the EC Treaty applying to their conduct.

²⁰ "Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services" [2002/C 165/03], 2002

Section 4

Market power

Market power determinations

- 4.1 Section 45 of the Act details the various conditions that may be set under the new regime. Section 46 details on whom those conditions may be imposed. In relation to significant market power (“SMP”) services conditions, section 46(7) provides that they may be imposed on a particular person who is a communications provider or a person who makes associated facilities available and who has been determined to have significant market power in a “services market” (i.e.: a specific market for electronic communications networks, electronic communications services or associated facilities). Accordingly, having identified the relevant markets as discussed in section 3, Ofcom is required to analyse the markets in order to assess whether any person or persons have significant market power as defined in section 78 of the Act (Article 14 of the Framework Directive).

Approach used to assess Significant Market Power

- 4.2 Under the new Directives and section 78 of the Act, SMP has been newly defined so that it is equivalent to the competition law concept of dominance. NRA’s will intervene to impose obligations on undertakings only where markets are considered not to be effectively competitive as a result of such undertakings being in a position equivalent to dominance within the meaning of Article 82 of the EC Treaty. Article 14(2) of the Framework Directive states that:

"An undertaking shall be deemed to have significant market power if, either individually or jointly with others, it enjoys a position equivalent to dominance, that is to say a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers."

- 4.3 Further, Article 14(3) of the Framework Directive states that:

"Where an undertaking has significant market power on a specific market, it may also be deemed to have significant market power on a closely related market, where the links between the two markets are such as to allow the market power held in one market to be leveraged into the other market, thereby strengthening the market power of the undertaking".

- 4.4 Therefore, in the relevant markets, one or more undertakings may be designated as having SMP where that undertaking, or undertakings, either individually or jointly with others enjoys a position of dominance. Also, an undertaking may be designated as having SMP where it could lever its market power from a closely related market into the relevant market, thereby strengthening its market power in a relevant market.

- 4.5 In assessing whether an undertaking has SMP, this review takes the utmost account of the Commission's SMP Guidelines as well as Oftel's equivalent guidelines²¹.

Criteria used in assessing SMP in the markets identified

- 4.6 As explained in section 3, it is Ofcom's view that the following markets can be identified:
- Access to the masts and sites operated by Crown Castle and acquired, constructed or installed for the purpose of the provision of national, regional and metropolitan terrestrial broadcast transmission services.
 - Access to the masts and sites operated by ntl and acquired, constructed or installed for the purpose of the provision of to provide national, regional and metropolitan terrestrial broadcast transmission services.
 - Access to other masts and sites used for the provision of broadcasting services.
 - Provision of managed transmission services to national terrestrial broadcasters.
 - Provision of managed transmission services to regional, metropolitan and local terrestrial broadcasters.
- 4.7 The assessments of SMP outlined below have been based on the evidence available to Ofcom and have taken account of the comments made in response to the September Consultation.

Assessment of Significant Market Power

Introduction

- 4.8 As explained at paragraph 2.18, the nature of the broadcasting industry and television in particular is that the broadcasters tend to enter into long term contracts. This is likely to persist over the near future because of the planned switchover to digital broadcasting in the UK which brings with it a substantial need for investment. The SMP analysis in this section therefore covers the period of development and contracting for the major change to the industry – up to around 2007.

Assessment of significant market power (“SMP”) against relevant criteria: markets for access to masts and sites for (respectively) ntl and Crown Castle to provide terrestrial broadcast services for national, regional and metropolitan transmission

- 4.9 In Ofcom's view, the most important criteria for the assessment of SMP in the markets for provision of access to masts and sites are: market share, control of an infrastructure which may not be easily duplicated, barriers to entry and countervailing buyer power.

Market share

- 4.10 Paragraph 75 of the SMP Guidelines states that “Market shares are often

²¹ “Oftel's market review guidelines: criteria for the assessment of significant market power” http://www.ofcom.org.uk/static/archive/oftel/publications/about_oftel/2002/smpg0802.htm

used as a proxy for market power... According to established case law, very large market shares – in excess of 50% – are in themselves, save in exceptional circumstances, evidence of the existence of a dominant position.”

- 4.11 Ofcom has defined two national markets for access to, respectively, well over 500 Crown Castle and ntl sites. There are very limited possibilities for a service provider seeking access to a Crown Castle site to access an ntl site (or vice versa) as an alternative (there is a very limited degree of overlap in radio and no practical overlap for television). Each company therefore can be regarded as holding a virtual 100% share of its respective market. Moreover, this situation has persisted for at least 20 years, albeit that ownership of each group of sites has changed during that period. As indicated in the SMP Guidelines such a high market share suggests strongly that the owner of any network of masts has SMP in that geographic market.
- 4.12 However, as the existence of a large market share cannot on its own establish that a dominant position exists Ofcom has considered the overall economic characteristics of the market, particularly taking into account the further criteria set out below.

Control of infrastructure

- 4.13 Control or ownership of a large network may present a significant barrier to entering that market, particularly if a competitor would have to invest large costs and time to replicate the infrastructure. Both ntl and Crown Castle have control of their respective infrastructure, i.e. the masts and sites required for terrestrial broadcasting transmission, which is not easily duplicated. There are large sunk costs involved in entering this market e.g. the location and acquisition of land and the installation of masts. Such costs, once sunk could not be recovered on exit from the market as the mast network has limited alternative usage. Even without the sunk costs involved, there is little potential for entry as any entrant would find it extremely difficult to obtain the necessary permissions (e.g. planning) to establish a duplicating mast network. Oftel previously concluded²² that there was no potential for new entry into these markets owing not least to planning restrictions, and there have been no subsequent changes to planning rules which would change this view. The only entrants into this market over the last 20 years have been through privatisation and acquisition, not by organic growth.

Barriers to entry

- 4.14 In addition to the barriers noted above, there are also strategic barriers to entry in this market. Crown Castle and ntl both offer a national service through their mast network and a site sharing agreement under which they provide each other with access to their respective networks. Both also have extensive experience in delivering the optimum service for broadcasters at the MTS level. A new entrant would find it extremely difficult to offer a comparable national MTS service and thus to compete for ntl and Crown Castle's downstream customers in the market for MTS without the right of entry to use ntl and Crown Castle networks. This is discussed in more detail in the examination of MTS market power below.

²² www.ofcom.org.uk/static/archive/oftel/publications/1995_1998/broadcasting/terrest.contents.htm

Countervailing buyer power

- 4.15 In theory, ntl and Crown Castle could exercise some measure of countervailing buyer power on each other, as each requires access to the other's sites and could threaten retaliatory action if access on reasonable terms were refused. In practice, they have addressed this requirement for access by putting in place an agreement to share the sites and masts on mutually agreed terms. There is no additional countervailing buyer power that each can exert on the other. However, there is no incentive for either company to allow access to its sites to any other party as it would increase competition for its downstream business. Ofcom therefore considers that there is presently very limited countervailing buyer power at the upstream level of access and to masts and sites.

Proposed conclusion on significant market power

- 4.16 Ofcom's proposed conclusion on the basis of the economic characteristics explained above is that each of ntl and Crown Castle have a position of SMP as set out in 4.2 in relation to the respective markets for access to the masts and sites acquired, constructed or installed by each of them for the purposes of national, regional and metropolitan; analogue and digital television and radio broadcasting.

Likelihood of competition developing in the future

- 4.17 Ofcom considers that it is highly likely that the proposed SMP of each of ntl and Crown Castle in the upstream wholesale market for access to masts and site is durable. As noted above, the markets are not dynamic (e.g. limited prospect of entry) and Ofcom considers that the present conditions are likely to persist (especially the entry barriers such as cost of establishing a mast network and planning obstacles to doing so). Similarly Ofcom does not anticipate a change in buyer power as the obligations for broadcasters to continue to use terrestrial transmission are expected to persist in the digital era.

Market power assessment in the market for access to other masts and sites for local broadcasting transmission

- 4.18 Local broadcasting is primarily radio. There are a very limited number of local television licensees and some of them are for limited periods, so that their presence is unlikely to affect an analysis of competition in the market for access to sites and masts for local broadcasting transmission. Local radio transmission has significant differences to national, regional and metropolitan transmission. The costs of supply are much lower and broadcasters have greater flexibility over transmission locations – they are not required to use designated sites in the way that television broadcasters are; nor do they need to use masts of a considerable height to serve a large population or geographic area. A local radio broadcaster does not need to transmit from large, purpose-built masts but may rather in many cases secure optimum coverage from rooftops or from non-broadcasting sites. An illustration of the lack of barriers to entry in this field is that it is easy to establish very short-term broadcasting projects (which may cover a sporting event or a school fair). Ofcom's proposed conclusion is that the local market for access to masts and sites is effectively competitive, and that there is no SMP.

Market power assessment in the market for national managed transmission services for the purpose of analogue and digital television and radio broadcasting

- 4.19 As mentioned above, an assessment of whether undertakings have SMP on the relevant market involves an assessment of whether the undertakings are dominant, as a result of which the market is not effectively competitive.
- 4.20 Article 14(2) of the Framework Directive recognises that an undertaking (in this case each of ntl and Crown Castle) may be deemed to have SMP if, either individually or jointly with others, it has a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers or ultimately consumers.
- 4.21 For the reasons set out below Ofcom considers that ntl and Crown Castle have been and will continue for the review period to be a dominant duopoly in the market for national managed services for analogue and digital television and radio broadcasting.
- 4.22 The SMP Guidelines set out (at paragraphs 86 to 106) guidance in assessing whether joint dominance is likely to exist. The Guidelines follow through the Commission's position on this issue as set out in its Access Notice²³ and also in light of subsequent Commission decisions and judgments of the Court of First Instance and the European Court of Justice²⁴. In particular, the Guidelines set out:
- that as stated in the Access Notice, it would consider two or more undertakings to be in a collective dominant position where they had substantially the same position vis-à-vis their customers and competitors as a single company has if it is in a dominant position, provided that no competition existed between them; and
 - that although the existence of structural links can be relied upon to support a finding of a collective dominant position, such a finding can also be made in relation to an oligopolistic or highly concentrated market whose structure alone in particular, is conducive to co-ordinated effects on the relevant market. This follows from the Courts' judgements in *Gencor* and *Compagnie Maritime Belge* and this position is summarised in paragraph 94 of the Commission's SMP Guidelines.
- 4.23 In assessing whether there is joint dominance in this market, Ofcom has had regard to paragraph 96 of the Commission's SMP Guidelines which state that NRAs when assessing *ex ante* the likely existence of a market which is conducive to joint dominance in the form of tacit co-ordination should analyse:

²³ Notice on the application of the competition rules to access agreements in the telecommunications sector (OJ C265, 22.8.1998).

²⁴ In particular, see the CFI judgment in *Gencor Ltd v Commission* Case T-102/96 [1999] ECR II – 753; the ECJ judgment in *Compagnie Maritime Belge Transports v Commission* Case C-396/96P [2000] ECR I – 1365 and the CFI judgment in *Airtours v Commission* Case T-342/99 [2002] ECR II – 2585.

- (a) whether the characteristics of the market makes it conducive to tacit coordination; and
 - (b) whether such form of coordination is sustainable that is,
 - i. whether any of the oligopolists have the ability and incentive to deviate from the coordinated outcome, considering the ability and incentives of the non-deviators to retaliate; and
 - ii. whether buyers/fringe competitors/potential entrants have the ability and incentive to challenge any anti-competitive coordinated outcome.
- 4.24 The SMP Guidelines (at paragraph 97) state that this analysis is facilitated by looking at the criteria set out in Annex II of the Framework Directive. Annex II notes that two or more undertakings can be found to be in a joint dominant position if, even in the absence of structural or other links between them, they operate in a market the structure of which is considered to be conducive to coordinated effects; and (without prejudice to the relevant jurisprudence on joint dominance) this is likely to be the case where the market satisfies a number of appropriate characteristics in particular in terms of market concentration, transparency and various other characteristics listed in the Annex.
- 4.25 Annex II states that the characteristics listed are not exhaustive nor cumulative. Rather, the list is intended to illustrate the sorts of evidence that could be used to support assertions concerning the existence of joint dominance. The SMP Guidelines further provide that it is necessary to examine all of the characteristics and to make an overall assessment rather than mechanically applying a check list. Depending on the circumstances of the case the fact that one or another of the structural elements usually associated with collective dominance may not be clearly established is not in itself decisive to exclude the likelihood of a coordinated outcome. The Guidelines conclude by stating that ultimately in applying the notion of joint dominance in the form of tacit coordination, the characteristics which will carry the most sway will be those which are critical to a coordinated outcome of the specific market under consideration.

Structure of this market

- 4.26 An examination of the markets for the provision of managed transmission services in relation to each of the criteria in the Annex is set out below. However, Ofcom's overall assessment is that a number of significant structural elements usually associated with collective dominance have characterised this market for some time such that the market is not effectively competitive; and Ofcom considers that these will continue for the review period.
- 4.27 In summary,
- 4.27.1 On the supply side, there exists a mature market, with high entry barriers leading to a lack of potential competition; operating to full capacity with a high degree of long-standing market concentration between two players. The upcoming digital switchover in particular further reduces the

potential for new entrants to counter the market power of the incumbents owing to the scale and complexity of the project which gives legacy providers a very strong position. The product's homogeneity, the similar market shares of the players and the informal links between them, similar costs and market transparency lead to muted competition between them and there is scope for retaliation in the event of any deviation from the coordinated outcome. These supply side characteristics not only invest the two firms with a high degree of market power, but also make it easy for ntl and Crown Castle to engage in parallel behaviour.

4.27.2 On the demand side, the limited growth in demand and low elasticity in demand mean that the economic strength of the duopoly is not effectively countered by pressures from customers or consumers. The customers (i.e. viewers and listeners) are bound by transmission obligations which leave them with low elasticity of demand. There is no means available for consumers to bring pressure to bear on transmission costs through their purchasing decisions. Broadcasters cannot, therefore, effectively constrain any exercise of market power by the suppliers.

4.28 Although Ofcom is proposing to place an upstream obligation on ntl and Crown castle to provide access to the masts and sites on cost-oriented terms, there are significant entry barriers to the market for the provision of national managed transmission services, as the incumbents benefit from economies of scope and scale and an established reputation. Moreover, suppliers must possess highly specialised expertise and a national field force in order to fulfil broadcasters' needs. It is therefore unlikely that new entrants will be able to erode the market power of the firms in the duopoly over the review period.

Assessment of joint dominance

Introduction

History of the development of the market

4.29 There are only two suppliers of MTS for the purposes of analogue and digital national television and national radio broadcasting. Both these suppliers came into being as a result of a structural separation of erstwhile vertically integrated monopoly businesses. On privatisation of the IBA (Independent Broadcasting Authority) transmission network in 1992, ntl inherited the responsibility for provision of analogue transmission services to ITV, Channel 4 and S4C. Similarly Crown Castle's analogue contracts with the BBC date from its acquisition of the BBC transmission business in 1997. Five (previously Channel 5) was launched in 1996 when ntl was the de facto sole commercial supplier of transmission at the time the launch was planned.

4.30 When digital transmission was launched in 1998, all the PSBs could in theory have chosen a different transmission supplier. In practice, broadcasters appear to have a very strong preference for a single supplier. Partly, this reflects economies of scope in the provision of analogue and digital transmission. Partly, it is a matter of convenience and the building of a successful commercial relationship. In practice, all PSBs did in fact choose the same supplier for both their digital and analogue transmission needs and

all those contracts continue in force for some time yet.

- 4.31 Two further digital transmission contracts were awarded in 1998 by SDN and ONDigital (later ITV Digital). SDN is a joint venture which secured the licence to operate multiplex A – its owners include ntl, which gained the transmission contract. The ONDigital contract was awarded to Crown Castle which, following the failure of ITV Digital, now has the licences for and transmits the relevant digital multiplexes (C and D).
- 4.32 In the case of radio, again the BBC contract for transmission of analogue and digital services is with Crown Castle. Indeed it is bundled within the same contract as provision of TV transmission due to economies of scale and scope and the convenience and cost of co-location with only one supplier involved. talkSPORT and Virgin inherited analogue frequencies previously used by the BBC in 1996 which placed Crown Castle in an extremely strong position to gain that transmission business which it did. Classic FM began operations in 1995 when, again, ntl was the only provider of national transmission services to the commercial sector. Thus broadcasters have tended to work with one transmission company, often for legacy reasons and subsequently to retain those affinities.

Long-term supply contracts

- 4.33 One feature of this market which causes it to stand out from communications markets generally is the long-term nature of the contractual relationships. Typically, transmission contracts have been awarded for periods of at least 10 years, tending to reflect the periods for which rights to use the relevant spectrum have been granted. Crown Castle's contract with BBC (for analogue television and radio) dates from pre-privatisation and is of duration of [X] years (to expire in [X]). The digital contract was entered into in 1999, but is also due for renewal in [X]. ntl's contracts with ITV and Channel 4 run to the end of analogue transmission which implies that ITV had not anticipated future competitive bids from Crown Castle. In radio, talkSPORT's and Virgin's contract with Crown Castle is likely to be due for renewal in [X] and Classic FM's contract with ntl is likely to be due for renewal in [X].

Lack of entry

- 4.34 ntl and Crown Castle have continued to remain the only suppliers since the structural separation of the original transmission companies. There have been no entrants into the MTS market either from other markets or from broadcasters wishing to enter the market. The initial phase of the digital roll-out has seen only the two companies: ntl and Crown castle provide MTS for digital broadcasting.
- 4.35 This section considers Ofcom's assessment of SMP according to the characteristics listed in Annex II of the Framework Directive. It first considers the possibility of third party entry and concludes that this is very unlikely during the lifetime of this review. It goes on to analyse other supply side issues and discusses how the characteristics of the two firms and the market provide conditions for a conclusion of joint dominance in the form of tacit coordination. Finally, it considers on the demand side, and concludes that broadcasters and consumers cannot exert an effective constraint on the ability of the two firms to exploit any market power identified by the supply side characteristics.

Supply side characteristics – likelihood of third party entry

Mature market

- 4.36 Market maturity, particularly evidence of stagnant or moderate demand side growth, is important because in a mature market there may be less incentive to compete aggressively. This situation would tend to create more favourable conditions for the adoption of coordinated behaviour, as there would be less incentive for players to compete to attract new customers, and less scope for successful market entry. Analogue MTS have been provided in the UK since the development of television services, initially by two organisations: the BBC and the Independent Broadcasting Authority. Both of these networks were privatised in the 1990s, the BBC's being acquired by Crown Castle and the IBA's by ntl, but the nature of the product being offered over the last 25 years or so has not changed. The last dynamic event in analogue MTS was the move to 625-line colour television commenced in the 1960s, but the fundamental nature of the market was not changed by that event; this was purely a technological shift.
- 4.37 Digital terrestrial transmission began in 1998. Both ntl and Crown Castle entered into contracts with multiplex licensees to provide Digital Terrestrial Transmission ("DTT") MTS to carry a range of radio and television channels. ntl and Crown Castle continue to be the only companies providing such services in the UK on a national basis. The DTT offering is not as mature as the analogue one but in addition to the extension in geographical scope necessary to achieve digital switchover, there is a theoretical possibility of additional spectrum being made available. However, no decisions have yet been made on the latter point and it is not expected to lead to a significant increase in the volume of transmission business.
- 4.38 Analogue radio broadcast services started in the UK in the 1920s and the BBC was the only broadcaster at the time. Digital radio services in the UK started broadcasting in 1999, with BBC's own digital services on Crown's Castle's DAB multiplexes and the Digital One multiplex, part-owned and serviced by ntl.
- 4.39 The maturity of the market suggests that the incumbent market players are unlikely to have a realistic threat of competition from new entrants, given the strength of traditional affinities, lack of dynamism and advantages of legacy contracts in this market.

High barriers to entry/lack of potential competition

- 4.40 As discussed in section 5, Ofcom is proposing that a network access obligation be placed on ntl and Crown Castle in the wholesale market for access to sites and masts. For the reasons set out below Ofcom considers that there are high barriers to entry in the market for national MTS. The relevant question in an analysis of SMP in the market for MTS is whether the availability of access at the wholesale level would facilitate entry into the MTS market.
- 4.41 Ofcom is of the view that upstream regulation is not sufficient to incentivise

entry in the intermediate market for MTS for national broadcasting in the short to medium term. This is because, even given the access obligations proposed in section 5 to remedy the position of SMP in the upstream markets, new entrants to the MTS market face significant entry barriers as explained below which cannot be readily remedied by regulation.

- 4.42 Ofcom believes that the likely entrants into this MTS market could be:
- current providers of local and regional radio managed transmission services;
 - the broadcasters and multiplex licensees themselves; and
 - companies active in transmission in other electronic communication services such as telecommunications.
- 4.43 Ofcom considers that there are a number of significant barriers which make new entry into this market unlikely over the period of this review and that therefore the business is in practice likely to continue to be shared between Crown Castle and ntl. The most significant of these barriers are:
- the wish of customers to purchase a turnkey solution from a single provider which is able to guarantee very high service quality. This suggests the need for a national field force as it would be more difficult to maintain quality using local or regional sub-contractors. It also places a premium on track record;
 - the specialised nature of the technology which is outside the experience and expertise of most of the existing national engineering field-forces; and
 - the likelihood that multi-service customers will continue to wish to use a single provider for all of their transmission services. Partly this is due to economies of scope of provision (e.g. in analogue and digital television transmission for the same customer). Partly it results from the enormously complex digital television switchover project which needs to be managed effectively (as discussed at 3.31) – having to deal with different analogue and digital television providers during such a period would give rise to an unwelcome increase in complexity which could easily place in jeopardy planned switchover dates.
- 4.44 The digital contracts for television currently provide for transmission only from 80 sites and it may be argued that when the digital roll-out expands (i.e. when transmission is built out to an additional number of sites), third parties could provide MTS from other sites. Ofcom believes that this is unlikely to happen in the medium term because national broadcasters would find it more attractive to use a single national supplier for their digital MTS services. This is not only because digital MTS is offered as a bundled service taking into account both site access and transmission, but also because the quality of output might be affected by having multiple suppliers – it is easier to provide national programming (with specific content such as local news inserted) through one provider. It also may enable a levelling of costs between profitable (easy to reach) sites and more costly sites where travel costs and accessibility may be more difficult. Therefore Ofcom considers it is likely that upon extension of the digital roll-out broadcasters will use a single supplier for their entire digital MTS needs.
- 4.45 As the provider of MTS to these broadcasters, ntl and Crown Castle have customised their networks to provide the service to their respective customers. The two companies have a very long track record in the

successful delivery of MTS for UK broadcasting. There are established systems for the procurement, installation, maintenance and monitoring of the MTS necessary to deliver broadcast services to the quality required by UK broadcasting obligations. In addition, much of the investment required to provide MTS has already been made by the two companies. This is because both Crown Castle and ntl own and operate the transmission networks originally built by the BBC and the IBA over the long period during the establishment of television MTS and have already invested in the equipment and expertise to provide digital MTS. Therefore a significant part of their costs are sunk, while new entrants would need to incur significant investment in order to provide an MTS.

- 4.46 New entrants who wish to serve the PSBs and multiplex licensees would have to plan and invest in such systems; such investment would involve significant fixed costs in relation to transmission equipment. This would raise the cost base of any new entrant relative to the cost base of ntl and Crown Castle. It would be a considerable risk for an entrant to embark upon planning to enter the market of national MTS because of these high barriers, including the potential sunk cost. Additionally, the legacy contracts that PSBs and multiplex licensees have with ntl and Crown Castle mean that they have a degree of confidence with respect to quality and delivery of the output ntl or Crown Castle can deliver, whereas no such confidence would exist with new entrants. A UK broadcasting licensee would need to be convinced that a new entrant would be able to deliver a comparable service, with no hiatus in service during handover.
- 4.47 Other possible entrants to the market are the broadcasters and multiplex licensees themselves. Transmission requires a different range of expertise and skills than broadcasting and multiplexing and Ofcom considers (in particular because of a shortage of such specialised staff) it is unlikely that those groups would be able to grow their competence or buy it in sufficiently quickly and adequately in order to be able to compete with ntl and Crown Castle over the review period. [§<]
- 4.48 For television transmission, the combination of the above factors places the incumbents in a particularly strong position. No other company can offer their combination of national reach, specialist expertise and track record. There are in addition economies of scale and scope in the provision of both analogue and digital contracts. The staggered timings of the current contract end dates exacerbate the problems of new entry. A new entrant would be able to bid for only part of the broadcasters' needs at any one time and would not be able to rely on economies of scope. If the broadcaster were to choose to curtail an existing contract, thereby facilitating new entry, it would have to be prepared to pay compensation to the incumbent for such curtailment.
- 4.49 In the case of radio, national commercial radio licences (talkSPORT, Virgin and Classic FM) fall for review by Ofcom in [§<] and it is reasonable to assume that contracts would be signed for the same period as that of the licence duration. The analysis for radio is similar to the analysis for television but less definitive in that in that whilst the incumbents' track record in offering a high quality turnkey solution is a significant factor, as is their expertise in transmission technology, the latter should reduce over time as the use of digital transmission technology increases. Also, the special complexity of the digital television switchover process is not mirrored in the radio world.

- 4.50 There are currently a number of independent providers of MTS for radio broadcasting, who provide transmission from sites that they either own themselves or lease from third-parties or use ntl or Crown Castle sites. It could be argued that, with access to ntl and Crown Castle sites, such independent MTS providers could easily enter the market to provide MTS for television or national radio. However the costs of radio transmission are significantly lower than those for television and also, all such entrants operate at the sub-national local, regional or metropolitan level. Ofcom considers it is not likely that such companies would be able to gear up in scale or national reach in order to enter the national MTS market as a credible competitor within the period of this review.
- 4.51 There could be other transmission companies, in telecommunications for instance, who might appear to be in a position to enter the MTS market for television. However, since all transmission is necessarily technology specific, Ofcom considers that transmission companies from other sectors would face the same barriers of large sunk costs, lack of expertise and the need to attract customers from the existing providers which are described above.
- 4.52 As discussed in section 5, Ofcom proposes to impose obligations which would allow third party transmission providers access to the relevant masts and sites operated by Crown Castle and ntl, sufficient to permit them to offer managed transmission services to broadcasters. Ofcom's intention is that this will, in the longer term, alleviate any market power downstream and facilitate the development of effectively competitive markets for managed transmission. However, for the above reasons, Ofcom considers the upstream access remedy will not, over the period of this review, alleviate the market power currently enjoyed by Crown Castle and ntl in the provision of managed transmission services to national broadcasters. While during the review period new entry could be conceivable as transmission contracts fall due for renewal and new transmission contracts for extended digital television transmission are offered, Ofcom considers the likelihood that new entrants would be able to offer a service which attracts the broadcasting customers is very small.
- 4.53 Beyond the lifetime of this review (that is to say for contracts awarded from about 2008), Ofcom expects that this may change. The special complexity of digital television switchover will cease to be a factor for such contracts. And the evolution of technology may mean not only that there is less added value to the customer in awarding contracts on a turnkey basis but also that a greater range of organisations has sufficient expertise to offer a credible service.
- 4.54 The analysis above suggests that there are considerable barriers to entry present in this market which make it unlikely that there are fringe competitors or potential entrants which might have the ability to challenge any anti-competitive coordinated outcome. This implies that there will be a limited prospect of new entry. Therefore the key point will be the nature of competitive interaction between ntl and Crown Castle.

Lack of technical innovation, mature technology

- 4.55 In relation to managed transmission services, although there is clearly a major technological change on the horizon with the switch to digital methods

of transmission only, many fundamental features of the MTS business for analogue transmission will remain. This is because for the time period of this review there will still be a requirement for broadcast content to be transmitted by analogue means. In relation to both analogue and digital, for the period of this review, Ofcom considers that the basic need to secure mast and site capacity and to understand how best to use that capacity remains, as do the basic competences of procurement, installation, monitoring and maintenance required to sustain an MTS business. Moreover, many of these competences are common to both analogue and digital MTS. The quality of service and coverage requirements will continue to be laid down in broadcasters' transmission obligations. Owing to these factors, there is little scope for innovation or product augmentation which might enable a new entrant to provide a novel proposition to attract customers away from the incumbents.

- 4.56 The mature technology of the service means that potential entrants will not be able to enter the market providing more efficient service through innovations and lower costs. The lack of technical innovation is an additional entry barrier that provides the two incumbent companies with market power during the period of this review, as it means that potential entrants are unlikely to have the ability to challenge any anti-competitive coordinated outcome. This is a further structural characteristic which suggests that there is limited prospect of new entry into this market.

Market concentration

- 4.57 The market is highly concentrated because the market for national managed transmission services in the UK has only two players who share the market between them in the absence of any new entry.
- 4.58 Ofcom considers in practice that the respective incumbents are in a very strong position to win any renewal or extension business for MTS for television and national radio as further discussed at 4.69. That would imply that all, or at the least the largest and most high-revenue transmission contracts are likely to stay with their respective incumbents over the period of this review.
- 4.59 The highly concentrated nature of this market, which is characterised by only two players and features which give the incumbent a significant advantage in any renewal or extension of an existing contract, reinforce the case that there is a limited prospect of new entry to this market.

Supply side characteristics relevant to competition between ntl and Crown Castle

Homogenous product

- 4.60 Both ntl and Crown Castle provide MTS to national broadcasters who have similar transmission obligations to broadcast nation-wide at particular frequencies with a particular degree of reliability.
- 4.61 As both ntl and Crown Castle provide a comparable national MTS service to major PSBs and commercial television and radio broadcasters to the same quality requirements, the products being provided by ntl and Crown Castle for MTS are effectively homogenous. This means that there is little or no scope

for product augmentation or differentiation; and thus no scope for competition on non-price factors such as differentiation or quality.

- 4.62 Where an industry is characterised by homogenous products, it suggests that there may be further evidence of a market which has the characteristics for collective dominance.

Similar market shares

- 4.63 In terms of the analogue terrestrial managed transmission service for television broadcasting, both ntl and Crown Castle have major PSB customers: ntl serves ITV, Channel 4/S4C, Five and Teletext; and Crown Castle serves BBC 1 and 2. For all these channels (save Five) a near universal service is achieved, with both companies transmitting from their own network and the shared sites of the other's network. Five is also supplied by ntl, but Five has only a limited coverage from 50 sites. Each of the companies therefore has the same number of larger analogue broadcasters; with ntl also serving the smaller broadcaster Five.
- 4.64 The digital transmission and distribution contracts were awarded in three phases: The first by the BBC, Digital 3and4, and ONDigital (later ITV Digital) in 1998 when the first services were launched; the second in 1999 when the SDN service was launched; and the third when Freeview was launched in 2002. Crown Castle holds the BBC 1 and 2 contract and the Freeview contracts. ntl has the contract for D3and4 and the SDN services contract. Therefore even for digital customers, it appears that Crown Castle and ntl have a comparable share of number of customers i.e. multiplex licensees.
- 4.65 The Commission guidelines set out that, where applicable, market shares should be calculated in terms of value. A common method of assessing market shares by value is to use revenue shares. However, in the market for MTS for television broadcasting, market share by revenue is not a useful indicator of market share by value for historic reasons [8]. The revenue shares for digital contracts are affected as Crown Castle has a large contract with BBC for its analogue and digital services. Ofcom is of the view that were the prices for MTS to reflect a valuation of the assets at their replacement cost, the shares of the two companies would be very similar in terms of value. Empirical evidence concerning the degree to which purchasers changed supplier from time to time would normally be useful in making an assessment of the extent to which market shares may change over time. In this market, the number of purchasers is very small, contracts have tended to be long-term and there have been no changes in affinity.
- 4.66 In national radio broadcasting, Crown Castle provides managed transmission to national AM broadcasters (BBC, Virgin Radio and talkSPORT), and for the national BBC FM broadcasts; and ntl provides transmission to the national commercial FM radio broadcaster, Classic FM.
- 4.67 During the lifetime of this review, contracts for the nationwide transmission of digital television are due to be signed, thereby facilitating the switch-off of analogue television signals by the proposed backstop date of 2012²⁵. These contracts should provide for

²⁵ See paragraph 3.31

- extension of the geographical reach of the current PSB digital transmissions from approximately 73% population coverage to near universal coverage;
 - increase in the reach of the non-PSB digital multiplexes, although not to the same extent; and
 - transmission of any additional multiplexes for which spectrum is made available (although no decisions have yet been made on this point and it is not expected to lead to a significant increase in the volume of transmission business).
- 4.68 The contracts are expected to replace both analogue and digital existing contracts in their entirety. Even though the sites currently used for digital transmission will continue to be used, the transmission equipment will in many cases need to be modified or replaced so that spectrum can be used most efficiently nationwide. If the contract were awarded to anyone other than the incumbent, there could be a question of significant additional payments in respect of contractual obligations under the existing contracts.
- 4.69 PSBs have powerful reasons for choosing the same provider for digital and analogue transmission, given the imperative of achieving a smooth transition from analogue to digital transmission and the fact that the same sites are being used for both services.
- 4.70 Further, in the case of the BBC, Ofcom considers it reasonable to expect that it will continue to prefer to use a single supplier for both TV and radio transmission as discussed at 4.32. On this assumption, the relevant contracts in this market would be:
- (a) a BBC contract covering analogue and digital, TV and radio transmission;
 - (b) contracts covering the nationwide transmission for the remaining digital multiplexes;
 - (c) legacy contracts for analogue TV transmission, progressively reducing in significance as transmission is switched over site by site; and
 - (d) contracts for commercial radio transmission.
- 4.71 The similar and high market shares of each of the two incumbent companies suggests that market shares could, in practice, only change significantly during the review period if there were to be any changes in affinity following the award of new digital transmission contracts. Ofcom considers for the reasons set out above that significant changes are unlikely. Ofcom considers that this, together with the other structural characteristics of this market make it conducive to tacit coordination.

Various kinds of informal or other links between the undertakings concerned

- 4.72 Ofcom considers that there are economic links between ntl and Crown Castle. These arise from their provision of upstream inputs into each others' MTS through their long-term practice of site sharing for both analogue and digital broadcasting. These links have enabled the two companies to be informed of certain aspects of each other's supply activities relative to other firms that do not have the advantage of a background in site sharing between them.

- 4.73 Although Ofcom is now proposing that both ntl and Crown Castle have an obligation to offer access to their sites to third parties, new entrants to the market will not be able to replicate the advantage of the legacy of long term sharing practice.
- 4.74 Whilst the existence of these informal links is not a pre-requisite to a finding of collective dominance, it supports Ofcom's view that the structure of the market is conducive to tacit coordination.

Lack of or reduced scope for price competition

- 4.75 In a competitive market, prices would tend to move towards cost. In the market for national MTS, there is unlikely to be intense price competition not only from potential entrants, but also between the incumbents in the market. The customised service that is provided to the PSBs and multiplex licensees implies that for one company to compete for the customers of the other company, costs would have to be incurred in terms of engineering and gaining trained staff to handle the operation and maintenance. The pass-through of such costs into price is likely to mean that broadcasters will prefer to be served through their legacy suppliers. Being a legacy supplier therefore implies that there is a reduced scope for price competition.
- 4.76 There are advantages to both companies in being a legacy supplier. As noted above, because the service being supplied is homogenous, the companies do not to any significant extent compete on quality or range of service. The only competition that is feasible is that of price competition. Due to the limited opportunities for competition for contracts, there is no evidence of any previous aggressive price competition.
- 4.77 Although both companies have bid for the digital contracts, Ofcom believes that the companies who have won the digital contracts have done so essentially on the strength of their analogue contracts. This means that being an incumbent analogue supplier provides legacy advantages in gaining the digital contracts, advantages that a competing supplier may not be able to match. In order to gain advantages such as economies of scope, each company will have to bid for both analogue and digital contracts (i.e. economies of scope are achieved in using the same sites for analogue and digital broadcasting). However, either company would incur significant costs bidding for and serving the customers of the other.
- 4.78 There would be significant costs associated with segmenting the current BBC contracts due to the ownership of equipment resting with Crown Castle, their expertise, site access arrangements already in place and the fact that an additional provider would need to secure additional site access for operation, alongside that already used by Crown Castle. If ntl were to make a serious bid for this contract, it is unlikely to find this profitable unless it could also utilise economies of scope by providing the analogue and digital television MTS to BBC.
- 4.79 The second advantage of the legacy providers is that each of ntl and Crown Castle has built equipment and systems in order to provide a customised service for its broadcasting customers. Bidding for another customer and gaining a contract would require investment in re-engineering the equipment and systems. There is also the risk that viewers of existing transmissions

may have interruptions to their programming while engineering work is in progress which might breach broadcasters' transmission obligations.

- 4.80 Such constraints limit the ability of any broadcaster to compete on price. The lack of or reduced scope of price competition in this market is a further characteristic which is likely to give rise to tacit coordination.

Similar cost structures

- 4.81 Both ntl and Crown Castle use similar inputs and competences. There are many similarities in the equipment for installation, maintenance and monitoring, with a limited number of manufacturers worldwide from whom to procure. In addition, as both ntl and Crown Castle are delivering similar services, Ofcom considers it is unlikely that one would be able to secure a better deal with manufacturers (e.g., bulk discounts). Similar strengths and expertise will be exhibited by both providers. The equipment used for transmission includes transmitters, combiners and antenna feeder systems. The expertise required to manage the transmission system involves the operation, monitoring and control of transmitters, and maintenance of transmission equipment.
- 4.82 Typically, the elements of a managed transmission service are:
- site and mast rentals/costs;
 - provision and installation of dedicated transmission equipment;
 - operation of transmission equipment, including network management (monitoring and control of transmission); and
 - maintenance of transmission equipment.
- 4.83 Both ntl and Crown Castle use the same major input of masts and sites to secure national coverage in provision of managed transmission services. There will be generally similar costs for the other inputs: there are only a limited number of global suppliers of transmission equipment to ntl and Crown Castle and as both are required to offer a comparable service to their broadcast customers, both will have similar needs in terms of maintenance, staffing, monitoring and ongoing expenditure. Also, both ntl and Crown Castle broadcast from the same transmitter sites across the UK, each using around 50% their own, 50% the other's .
- 4.84 Ofcom therefore considers that ntl and Crown Castle are subject to similar cost structures for their provision of national MTS. This feature is likely to persist during the period of this review.
- 4.85 Ofcom considers that, along with market transparency (discussed below), the similar cost structures allow the two firms to adopt a common policy of muted price competition, which results in both companies retaining their respective market shares.

Market transparency

- 4.86 Although generally, market transparency in assessing collective dominance implies price transparency, the key issue is whether deviation from a common

strategy can be observed. Generally, such deviation relates to price, however, in this case the deviation would be for either firm to depart from a policy of muted competition. Hence, in this market, it is more relevant to discuss transparency with respect to the degree of aggression with which firms compete for each other's legacy customers.

- 4.87 Both ntl and Crown Castle offer a common national service from the same network of masts and sites – they are interdependent because without such sharing each others' sites it would not be possible for either to offer a national service. Therefore, there is a degree of transparency of each others costs as a result of site sharing. There are also similar costs involved in equipment and staffing to provide the transmission service.
- 4.88 Ofcom considers that any attempt by one company, for example Crown Castle, to deviate from the common policy by bidding for a contract held by ntl and increase market share would be observable to the other party, and would run the risk of inviting retaliation.
- 4.89 For instance, if a second company were to consider bidding seriously for the first's customers this would depend on the company having the necessary access to masts, equipment and trained staff that can meet the requirement of the customer. Although the bidder need not necessarily incur the costs of equipment before making a bid, it is likely that it would need to be in a position to have trained staff in place that can operate the additional equipment to the requirements of the customer. Since MTS for television or radio is a specialised service, an obvious way of getting such trained staff is to actually purchase the services of staff employed by the first company, since no additional training costs would need to be incurred. Any such moves by the second company to recruit staff in employment is likely to be clearly observed by the first company, thereby providing it with the opportunity to retaliate by challenging for the second company's legacy business.
- 4.90 The transparency of the market can act as a disincentive to deviate from a coordinated outcome.

Retaliatory mechanisms

- 4.91 A key element of sustaining a coordinated outcome is that that any deviation from a coordinated outcome may be readily detected and the affected firm can take steps to retaliate (hence the significance of market transparency). Retaliatory action by the firm affected could take three forms:

- Reactive – the affected firm could try and win back its market share by undercutting the deviating firm. However, in doing so, it will be left with lower profits while the deviating firm can enjoy the same profits from its own share of the market;
- Punitive – if the deviating firm has to necessarily incur some sunk costs in order to compete for the other's share (i.e. in order to make a credible bid to the customer), the affected firm can react after the deviating firm has incurred these costs to try and win back its market share. In doing so, while it may be left with lower profits, it can ensure that the costs of the deviating firm are raised and hence, its overall profits are lowered. Raising rival's costs can therefore act as a credible threat;
- Proactive – if one firm deviates by trying to gain the market share of the other, the second firm could adopt the same strategy, such that the deviating firm runs the risk of not only not gaining the market share of the other, but also losing its own market share. The result of each firm competing to obtain the other's market share will be lower market prices and overall profits.

4.92 Any of the above types of retaliation could be introduced as a response by one firm to deviation by the other from the common policy. Such action would result in a departure from the common policy, would be less profitable to both companies and could act as sufficient deterrent. It would therefore be more profitable for both companies to choose a coordinated outcome rather than a competitive outcome. This coordinated outcome means that while each company still retains a roughly equal market share, the price that they charge their customers is higher than the competitive price²⁶.

4.93 As the market for MTS is characterised by long-duration contracts, any retaliation against a deviation from the common policy will not necessarily be instantaneous. However, it is likely that the next round of transmission contracts to cover the digital switchover process are likely to be agreed at around the same time as each other, and can be expected to be of similar duration to each other owing to the need to secure a return on such a major investment. For example, the BBC contract held by Crown Castle is due for renewal during the period of this review. Should ntl wish to bid aggressively for this contract, Crown Castle could retaliate by bidding for ntl's contracts for transmission of SDN and D3and4. The long-term and broadly concurrent nature of the contracts also mean that there is limited opportunity for that one provider to find it feasible to compete aggressively and risk retaliation in the longer term in order to secure a contract for a short time in order to secure high profits over that period.

4.94 Ofcom considers that the risk of retaliation is such that is likely to keep the market in a position of joint dominance for the review period²⁷.

²⁶ The result of a coordinated outcome in many markets is a price higher than the competitive price, but output is lower than a competitive outcome. In the case of terrestrial broadcasting transmission however, the market output is fixed due to the obligations placed on the broadcasters. Hence the profits here would be higher than a situation where the market output was variable.

²⁷ As explained in the SMP Guidelines (paragraphs 70 and 71) an *ex ante* assessment of dominance is necessarily forward looking and involves a prospective assessment of expected future behaviour. The analysis of this market is therefore a forward looking assessment conditioned by the behaviour existing at the time of this review.

Absence of excess capacity

- 4.95 The presence of spare 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.

Demand side characteristics

- 4.96 The above section has discussed how supply side characteristics of the market mean that the prospects of new entry over the period of this review are limited; invest the two companies currently present in the market with market power and how the conditions of the market are conducive to tacit coordination.
- 4.97 This section considers by reference to the characteristics listed in Annex II whether there could be countervailing forces on the demand side that can constrain the possible exercise of the market power.

Stagnant or moderate growth on the demand side

- 4.98 The major change on the horizon for analogue MTS is the transition to fully digital television and the geographical extension of digital radio services. This will entail a major investment and the expansion of digital services represents a major step change in UK broadcasting. The major customers for analogue and digital television MTS will continue to be the PSBs and digital multiplex licensees. There is likely to be an increase over the next few years in the number of sites used for digital transmission as broadcasters seek to maximise coverage, this increase is likely to come from existing customers. However there is very limited scope for increased demand for terrestrial managed transmission services owing to spectrum constraints, except from possible additional demand at the margins as noted at 4.37.
- 4.99 The low growth in demand facilitates renewal of existing contracts on similar terms and conditions. The lack of new demand means that pressure from consumers will not erode the market power of ntl and Crown Castle.

Low elasticity of demand

- 4.100 In the case of terrestrial MTS, the requirement to secure MTS is a necessary requisite for being in the business of terrestrial broadcasting: once a broadcaster has identified and secured the necessary spectrum and licences they can only fulfil their need to reach their audience through using MTS. Thus there is no scope for a broadcaster to respond to changes in price by reducing their demand for MTS or to substitute to an alternative platform (such as cable or satellite). Once a broadcaster has decided to offer a terrestrial service and been licensed so to do, they may not use alternatives to secure coverage.
- 4.101 This situation is likely to persist within the period of this review. This is likely to result in a low elasticity of demand, implying that broadcasters are 'captive customers' who cannot constrain the ability of suppliers to exploit their market power.

Lack of countervailing buyer power - customers

- 4.102 The current customers of ntl and Crown Castle for national transmission are PSBs and multiplex licensees. Broadcaster respondents to the September Consultation indicated they do not consider that they can currently compete with ntl and Crown Castle in the managed transmission services market because they have outsourced the technical expertise required to operate a managed transmission service – to ntl and Crown Castle at privatisation. Even if they were to consider entry in the future, they are likely to need to purchase or lease equipment from the incumbents. In the absence of regulation the incumbents have every incentive to deter such entry by offering the sale or lease of their equipment at prices that exceeded their costs. Therefore, absent regulation, entry by customers is not likely within the duration of this market review.
- 4.103 It is not likely that broadcasters would be able to exert any buyer power. Although the broadcasters can obtain a national MTS from either of the two providers, the extent to which they might exert buyer power depends on the pressures they face from consumers of broadcasting services. If the reduced cost of transmission is not passed to consumers, and the cost of transmission is not likely to cause consumers to switch broadcasters²⁸, it is unlikely that consumers will be able to exert any pressure on broadcasters.

Consumers

- 4.104 As far as consumers (viewers and listeners) are concerned, 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 their consumption, their consumption decisions cannot impact on the structure of the market. Since every transmission supplier would have to provide transmission to a particular quality required by consumers, the choice of a transmission supplier is therefore unlikely to be relevant in a consumer's decision to consume the product (i.e. watch television). Consumers pay a licence fee irrespective of the amount of viewing or indeed the means of obtaining television content: even if a viewer were to view content available exclusively on cable or satellite transmission, they are still required to pay a licence fee, part of the revenue from which is used to pay for terrestrial transmission. There may be a case that the licence fee is dependent on the broadcaster's costs of obtaining transmission services; and that therefore the consumer is indirectly affected by the costs of transmission. That is, an argument could be made that as cost increases or quality decreases; the number of viewers will decrease. However this is true of all types of broadcasting and not necessarily terrestrial broadcasting alone i.e. if the licence fee rises, it does not cause consumers to shift away from terrestrial, because they do not avoid the increase by switching.
- 4.105 It is arguable that the only consumers affected by the costs of transmissions services inbuilt into a licence fee are those considering purchasing a television or discarding one. A majority of consumers in the UK (97.8% of

²⁸ If consumers were to switch their viewing to other broadcasters, those broadcasters financed by advertising might find it more difficult to procure advertising revenue; the BBC might be indifferent in the short run – however, should there be a switch of consumers away from the BBC it is possible that the amount of the licence fee might be reviewed.

households²⁹) own a television and are unable to affect the level of licence fee by the amount of consumption they choose or the route by which they obtain their purchase of television content: terrestrial, satellite or cable. It is highly unlikely that a significant portion of such consumers would wish to discontinue owning a television. A similar situation pertains in radio: irrespective of the means of transmission the obligation to secure terrestrial transmission persists, and there is no licence fee in place at all.

4.106 Therefore, even if consumers were to switch away from a particular broadcaster, or indeed the technology used for broadcasting, it is unlikely that this would be due to the costs of transmission. Consumers switch due to a variety of reasons, but it would be reasonable to assume that their switching behaviour would not influence the choice of a transmission supplier. Again, these features suggest that consumers cannot counter the market power of ntl and Crown Castle.

Is the coordinated outcome likely to be sustained?

4.107 Ofcom's overall assessment by reference to its consideration of each of the characteristics set out in Annex II is that the structure of the market has been and is conducive to coordinated outcomes and accordingly, ntl and Crown Castle have been and are a dominant duopoly. The SMP Guidelines requires NRAs to analyse competition issues on a forward-looking basis. This requires an analysis of whether the conditions for tacit coordination which support the conclusion of the existence of joint dominance are likely to be sustained over the review period³⁰. Set out above is Ofcom's conclusion on the ability and incentives on ntl and Crown Castle to deviate from a coordinated outcome in light of the opportunity for retaliatory action in the event of such deviation. Ofcom's proposed conclusion is that there has been no real deviation over a lengthy period and that the risk of retaliation is likely to prevent future deviation during the review period.

4.108 Further, Ofcom's assessment of the structure of the market is that there is very limited ability for new entry and very limited countervailing buyer power which could alleviate the characteristics of the market players and the market on which Ofcom's finding of joint dominance is based.

4.109 In summary:

4.109.1 Ofcom does not believe that the possibility of competition from other players in MTS is likely to disincentivise a policy of coordination between ntl and Crown Castle in the national market for MTS over the period of this review. The importance of sustaining a reliable service (particularly given the move to digital switchover), the long-term nature of the contracts, the risk-aversion of the customers, give the incumbents a very strong advantage.

4.109.2 Because of the very high barriers to entry arising in particular from the specialised nature of the required expertise and the requirement for a national field force, there are very few, if any, credible new entrants.

²⁹ BARB Establishment Survey June 2003.

³⁰ In its analysis, Ofcom notes in particular the SMP Guidelines, paragraphs 70 and 71 in relation to the circumstances of carrying out a necessarily prospective assessment of dominance.

The preference for a single supplier to cover all the transmission needs of a broadcaster, the timing of expiry of existing contracts, the transparency of the market and the possibility of retaliation would make it very difficult for a new entrant to break in, and Ofcom considers the only likely providers are the two incumbents.

4.109.3 Ofcom is of the view that most realistic prospect of successful entry is likely to occur in the medium to long-term (most likely in radio) and will be facilitated by the obligation to provide access at the upstream level. However, for the period of this review, it is likely that both ntl and Crown Castle would continue their dominant position due to the significant advantages they have over new entrants and in so doing would have an incentive to continue their coordinated behaviour (commitment to a strategy of muted competition) rather than resort to competitive behaviour.

4.110 Therefore, Ofcom considers that these features are likely to continue during the review period so that the joint dominance of ntl and Crown Castle will be sustained.

Conclusion on SMP in markets for managed transmission services for national broadcasters

4.111 Ofcom has considered the characteristics set out in Annex II of the Framework Directive to assess the competitive position of ntl and Crown Castle in the market for managed transmission services for national broadcasting. There is a mature market with limited dynamism. In the past the only entry has been through acquisition with little scope for organic growth. There are high barriers to entry –notably features of incumbency that are difficult to replicate, particularly the specialised technical competences needed and the national field force required to support the service. The technological changes on the horizon with the move to digital television are still likely to take place in a context of the incumbent providers occupying a position of strength vis-à-vis their competitors, customers and consumers.

4.112 Historical factors such as site sharing have led to a position where both parties are interdependent and have symmetrical knowledge of and observance of each other inputs, costs and any expansion prior to any competitive bid. Ofcom notes that ntl and Crown Castle have a strong position by dint of their history in the market, a market where there is limited scope to compete on non-price factors owing to obligations which lead to limited scope for product augmentation or quality of service competition. There is also likely to be muted competition on price as ntl and Crown Castle would each find it costly to re-orientate their business processes to take on board service provision to compete for the customers of the other. Ofcom also notes that end users (viewers and listeners) may not influence through their purchasing decisions the price paid for transmission.

4.113 The remedy imposed by Ofcom in the upstream market for access to masts and sites at cost-oriented prices is not likely to constrain the two suppliers from coordinating during the second round of contracting. This is because significant entry barriers will persist despite the upstream remedy.

- 4.114 Ofcom has examined each of the criteria in Annex II to consider the characteristics of this market. For the reasons outlined in this analysis its overall assessment is that the structure of this market has a number of features which invests ntl and Crown Castle with a high degree of market power which makes it easy for them to engage in parallel behaviour such that the market is characterised by tacit coordination, that there has been no deviation by either from such parallel behaviour and that the risk of retaliation will mean that it is not likely that there will be future deviation.
- 4.115 Coupled with these structural features, the demand side characteristics of this market means that customers and broadcasters cannot bring pressure to bear of ntl and Crown Castle and cannot therefore effectively constrain any exercise of market power by them. The result is that the market is not effectively competitive and Ofcom considers that this assessment of the market will continue to be correct for the review period.
- 4.116 For these reasons Ofcom's proposed conclusion is that ntl and Crown Castle have a position of joint dominance in the market for the provision of managed transmission services for the purpose of providing analogue and/or digital terrestrial broadcasting services within the United Kingdom, to deliver a national broadcast service;
- 4.117 On the basis of this proposed conclusion, Ofcom is proposing to address the joint dominance in the market by imposing an obligation on both ntl and Crown Castle to supply MTS to national broadcasters on fair, reasonable, non-discriminatory and cost-oriented terms. This is discussed in detail in section 5.

Future market developments beyond this review period

- 4.118 Ofcom notes that the basic technology used for transmission has changed over time and can be expected to evolve further. Analogue television transmission equipment tended to be highly specialised and require equally specialised maintenance and operational skills. By contrast the basic equipment used for digital transmission in general and digital audio broadcasting in particular can be simpler to install and operate, and the replacement of parts may be less specialised. Although such replacements are likely to be rare, and given the generally reliable operation of the equipment this is not likely to form a major element of an MTS contract (having a field force presence to maintain other elements of the system, monitor performance and manage / report faults is much more significant) Ofcom notes that national MTS, while still to be regarded as one market with common competitive conditions, operates on a technical continuum which then feeds through into the degree of potential competition for certain aspects of the service. What this does not affect is broadcasters' basic requirements and how they may most easily be fulfilled: it remains true that broadcasters need to secure a reliable service in order to fulfil their obligations. An operator such as ntl or Crown Castle which is in a position to offer a turnkey full-service solution of procurement, installation, maintenance, monitoring and fault reporting and resolution will be in a position which appears very favourable for the present time.
- 4.119 Ofcom's aspiration is that the access obligation in the upstream market would give rise to market entry at the MTS layer in national broadcasting. However,

as noted in the analysis above, there are concerns that the prospects of market entry in national broadcasting MTS are not strong in the short term. The upcoming major procurement and installation exercise necessitated by the ramp-up to digital switchover in television; and the need for a full-service solution for all national broadcasters lend weight to the incumbents' experience, reach and competence. However, it is likely that in the future, following switchover, that there will be a greater prospect of market entry, with industry features such as the technological evolution noted above and the major digital rollout complete, the prospects for market entry will be greater. The upstream access obligation should help to facilitate market entry in broadcasting in general over time.

Market power assessment in the market for local, metropolitan and regional managed transmission services for the purpose of analogue and digital radio broadcasting

Introduction

- 4.120 Unlike MTS for national radio and television, there are many independent providers of MTS for local, metropolitan and regional radio who self-provide the service from their own sites, or provide a service through access purchased from third parties, or from ntl and Crown Castle on unregulated terms. There are approximately six big radio groups, 13 medium-sized radio groups, and 46 independent radio stations all securing access and purchasing (or self-providing) MTS. There are a very limited number of "restricted service licence" holders in television, who tend to be short term, or local (or both), community based broadcasters of limited relevance to this review owing to their limited scale. As with section 3 therefore this section's discussion of local and regional broadcasting shall be in the main illustrated by reference to radio.
- 4.121 Ntl's share, estimated at around 80% by revenue of commercial local, metropolitan and regional radio, is currently significantly higher than any other provider's share, mainly due to its legacy contracts. However, as with national MTS, market share by revenue is not a useful indicator of market share by value because of historic reasons relating to the principles upon which the networks were privatised. Crown Castle entered the commercial local and regional radio market in 1996, and hence had few opportunities to provide services to broadcasters who were already tied into contracts with ntl. Crown Castle also has all BBC local, regional and metropolitan radio contracts which is a comparable market share overall to that of the whole commercial sector when considered in terms of the total radio spectrum used by each.
- 4.122 These significant and comparable market shares held by ntl and Crown Castle might lead to a presumption that either ntl or Crown Castle had SMP in relation to their respective customers or held joint SMP in the market for local, regional and managed transmission services. Ofcom has given consideration to this view but believes that the presence of an upstream obligation to provide access to sites and masts for the purpose of regional and metropolitan transmission, along with the other significant features of the market such as the presence of a small but growing population of independent MTS providers at the local, regional and metropolitan level and

the small but significant proportion of radio stations which self-provide; means that there is considerable potential for other MTS providers to be able to erode the market shares of ntl and Crown Castle.

- 4.123 Prior to privatisation, the IBA undertook all commercial radio transmission and thus ntl inherited this position upon acquisition. Around 65% of smaller radio stations (those transmitting below 2kW) still use ntl (roughly around 80% of commercial radio by revenue). Around 3.6% of smaller commercial stations use Crown Castle (Radica and Sound Broadcasting Services (sbs), two independent providers of MTS, have much larger shares than Crown Castle – 5.3% and 10.3% respectively). Around 10% of such smaller station either self-provide or have one individual contractor taking charge of their transmission.
- 4.124 The SMP Guidelines stress (paragraph 78) that while high market shares might mean that the operator concerned may be in a dominant position, NRAs should undertake a thorough and overall analysis of the economic characteristics of the relevant market before making an assessment of Significant Market power (SMP).
- 4.125 Ofcom has undertaken the SMP analysis based on the criteria below which have been identified by the Commission, and which it considers to be relevant in this case, in order to establish whether ntl or Crown Castle, either independently or collectively, would have the power to behave to an appreciable extent independently of either's competitors, customers and consumers in the market for local, metropolitan and regional MTS to radio broadcasters.

Assessment of Market Power

Overall size of the undertaking

- 4.126 This criterion helps in assessing market power with reference to the size of the undertaking that might provide it with an advantage over its competitors. Ntl is a larger undertaking than all the independent providers of MTS for radio (based on turnover, as well as the overall size of the company). However, it is unlikely that it would be considered a larger undertaking than Crown Castle either in terms of sites, masts and other equipment, or in the number of employees, given that Crown Castle holds the sizable BBC business. Both ntl and Crown Castle operate roughly the same number of sites (totalling 1,154) and share the rest of the sites through their site sharing agreement. Both provide a national MTS service for radio broadcasting; which would enable them to have the necessary size to provide a local and regional MTS service for radio.
- 4.127 Ofcom's view is that the sizes of ntl and Crown Castle are comparable to each other. None of the independent providers are a comparable size to either ntl or Crown Castle.

Control of infrastructure not easily duplicated

- 4.128 The principle behind control of infrastructure is discussed at 4.13 above. Ntl has control over its network of sites and masts from which a MTS for radio service can be provided. However, as already mentioned ntl and Crown Castle's respective networks each represent only 50% of the masts and sites

in the UK. In addition, Crown Castle and ntl have a site sharing agreement in place (that is valid until 2005, but has provisions that allow it to be extended for a further 15 years), that allows both ntl and Crown Castle to have control of infrastructure that cannot be easily duplicated.

- 4.129 Ofcom is proposing in this Consultation (see section 5) to place an obligation on ntl and Crown Castle to offer access to their masts and sites (which can be used as a wholesale input to provide local and regional MTS) on fair, reasonable and non-discriminatory terms. Therefore any SMP analysis at the MTS layer needs to be undertaken keeping in view such a proposed upstream access obligation.
- 4.130 If the masts and sites of ntl and those of Crown Castle were to be available on regulated terms, there would be no necessity for an entrant to duplicate the costs of the incumbent by establishing a network. Therefore given the proposed upstream obligation, this criterion provides no guidance on whether ntl or Crown Castle, or ntl jointly with Crown Castle might have SMP in the market.

Technological advantages or superiority

- 4.131 The principle here is that technical advantages or superiority may represent a barrier to entry and also possibly an advantage over existing competitors. Unlike national MTS, local and regional MTS require much lower power transmission and the technology is more reliable. This also means that unlike national MTS, local and regional transmission services require less specialised skills in the provision of the service. Therefore, although ntl might have the necessary technology in place and have experience in delivering the service, its advantage is unlikely to be greater than that of other providers, including the smaller independent providers.

Absence of or low countervailing buyer power

- 4.132 There are a number of customers of local, metropolitan and regional MTS for radio (approximately 6 big radio groups, 13 medium-sized radio groups, and 46 independent radio stations). The main providers of MTS for local, metropolitan and regional radio are Crown Castle, ntl, Radica and sbs. There are also smaller independent providers and there is some self-provision of MTS by small stations. In addition, the obligation to provide access to masts and sites means that there are no significant entry barriers for any provider of local or regional MTS in seeking to increase their market share. It is therefore likely that customers would be able to choose between many providers. Indeed, the experience of MTS in radio is that there has been intense competition between the different providers with broadcasters indicating that they have received bids from at least ntl and Crown Castle and other players active in the market – from a 100% ntl market share (of all commercial radio stations) at privatisation, ntl's share has fallen to 65% by volume with sbs and Radica as the significant independent players.
- 4.133 There is little indication of an absence of countervailing buyer power.

Economies of scale and scope

- 4.134 The general principle behind economies of scale and scope is that they can act as a barrier to entry and provide an advantage over competitors. Except

for ntl and Crown Castle who provide MTS for analogue and digital national television and local and national radio, as well as controlling the wholesale mast and site networks between them, no other third party provider can benefit as much from economies of scale and scope. In that respect, it could be argued that ntl and Crown Castle each are likely to have a cost advantage over an independent provider. Theoretically, Crown Castle and ntl are likely to be capable of matching each other's cost base as each has similar economies of scale and scope. Additionally, since local radio MTS may have to be supplied to distant areas which have a lower density of population and hence are less profitable, it is unclear why either ntl or Crown Castle might have a cost advantage over an independent provider who could establish a local network. For example, a national operator may be based at a considerable distance from a regional centre and thus a local independent operator will be well placed to compete.

Vertical integration

4.135 Vertical integration can promote dominance by making market entry harder and through potential ability to lever market power from related markets. ntl and Crown Castle are vertically integrated companies and own significant proportions of the sites used for providing a local and regional MTS for radio and for the reasons explained above are considered to be dominant in the market for access to masts and sites (which includes in relation to masts for local and regional transmission). This might have constituted an entry barrier to those operators in MTS for local and regional broadcasting who are not vertically integrated.

4.136 However, Ofcom is proposing to counter ntl and Crown Castle's SMP in the upstream masts and sites market by requiring ntl and Crown Castle to offer access to other parties on regulated terms. Hence, if the rights of access were available to a third party on the same terms as they are available to ntl and Crown Castle, the criterion of vertical integration does not automatically imply a finding of dominance in the market for local and regional MTS, either individually or jointly.

Absence of potential competition/entry barriers

4.137 Ntl is currently the main provider of commercial local and regional MTS and this is due to its legacy contracts with broadcasters. However, there are several other providers, one of which is Crown Castle, who have the ability to compete with ntl. Crown Castle is the provider of local and regional MTS to the BBC, again due to legacy contracts.

4.138 Following Ofcom's proposed regulation of access to masts and sites, there is no *a priori* reason to believe that there is unlikely to be competition in bidding for ntl's current contracts at the time of their renewal given the present number of providers in local and regional MTS. Broadcasters have also indicated that in addition to price, they are sensitive to the coverage predictions made by companies bidding for MTS contracts (i.e. broadcasters base their decisions on awarding contracts at least equally on the quality and reliability of transmission, as they do on price). Thus, while it may be argued that this places ntl in a favourable position, by virtue of being the legacy supplier, it could equally be argued that Crown Castle could effectively compete on quality and reliability due to its vast experience in handling MTS for national radio services. Moreover, Ofcom notes the inroads made by

independent providers into this market and the part played by self-provision and considers that there is every possibility that these will be more significant features of the market going forward – with around 30% of smaller station contracts resting with non-ntl, non-Crown Castle providers there is clearly dynamism in the market.

- 4.139 In the absence of a regulated access to the mast and site network, it could be argued that entrants to regional, metropolitan and local MTS would face significant entry barriers and that there would be an absence of competition to ntl save for Crown Castle, who has a similarly strong position. However, following the upstream remedy proposed by Ofcom, since all providers have access to the sites and masts of ntl and Crown Castle, there is every possibility that they would be able to compete with ntl and Crown Castle at the regional as well as the local level, as they would have expertise in radio transmission which could be brought to bear on the regional service; and have no requirement for a national field force. This is by contrast with the situation in the market for national managed transmission services where the highly specialist nature of the technology (particularly in television) and the need for a national field force combine to make it extremely difficult for third parties to break into the market.

Conclusion

- 4.140 Due to the observed concentration in the market for MTS for local, metropolitan and regional radio broadcasting, Ofcom has considered whether ntl, or Crown Castle, might meet the criteria required for a finding of single dominance. It has also considered whether the market characteristics suggest that ntl and Crown Castle might together enjoy a position of dominance.
- 4.141 Having considered all the criteria, Ofcom is of the view that although ntl and Crown Castle both presently enjoy a high market share respectively, in commercial and BBC radio sectors; there is a possibility of that share being eroded when the current contracts held by ntl and Crown Castle come up for renewal. Although each is likely to compete for the other's business, there is also a strong possibility that independent providers (including self-providers) could compete on equal terms for the generality of the contracts. This has been observable in the market thus far: in the early 1990s during the era of public ownership all commercial radio transmission was undertaken by the IBA (ntl after privatisation). However, at present around 35% of commercial FM radio stations (transmitting at under 2kW e.r.p.) have contracted for their managed transmission to be undertaken by alternatives to ntl: either specialist transmission companies such as Radica and sbs; or via self-provision. As this was in the absence of an upstream access obligation, Ofcom would expect this figure to rise over time were an access obligation to be put in place.
- 4.142 Ofcom's view, therefore, is that ex-ante regulation at the upstream level of access to masts and sites is sufficient to ensure that any current positions of strength in the market for MTS to local, metropolitan and regional radio broadcasting are subject to competitive pressures in the near future.
- 4.143 Ofcom is therefore proposing to make a finding that the market for MTS for the purposes of local, metropolitan and regional radio broadcasting is competitive:

- Market for the provision of terrestrial managed transmission service for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver other than a National Broadcast Service.

Market effectively competitive and no supplier has significant market power.

Views of consultation respondents on Ofcom's market power determination

Access to masts and sites

4.144 There was general agreement from respondents that ntl and Crown Castle have significant market power in the market for access to their respective masts and sites. One respondent suggested that ntl and Crown Castle were both dominant in one geographical market. Ofcom takes the view that ntl and Crown Castle have separate networks that may only be used as a single UK-wide network when the regulatory intervention (site sharing) is in place. It was noted by other respondents that some form of site sharing arrangements might be agreed, even without regulation, in order for either company to offer national coverage. This may be possible, but as noted above an agreed site sharing (network access) agreement between ntl and Crown Castle does not allow for market entry at the downstream level.

Managed transmission services

4.145 As noted in section 3, many respondents were keen that Ofcom define a downstream market for managed transmission services and consider the state of competition in that market. Ofcom has now defined and examined this market as set out above and has defined appropriate markets and identified the market segment in which it considers that ntl and Crown Castle have joint SMP, while finding there is no SMP in the remaining segment, substantially as a consequence of the proposed upstream access obligation discussed in detail in section 5.

Section 5

Regulatory remedies – SMP services conditions

The legal framework for imposing regulatory remedies

- 5.1 As explained in section 4, Ofcom proposes that ntl and Crown Castle have SMP in the respective markets for access to their masts and sites for the purposes of terrestrial broadcast transmission services on a national, regional and metropolitan basis; and joint dominance in the provision of managed transmission services on a national basis. In this section, Ofcom proposes the SMP services conditions to be set as the regulatory remedies to deal with ntl and Crown Castle's SMP.
- 5.2 Section 87(1) of the Act provides that, where Ofcom have made a determination that a person is dominant in a particular market, it must set such SMP conditions as it considers appropriate and as are authorised in the Act. This implements Article 8 of the Access Directive.
- 5.3 Paragraphs 21 and 114 of the Commission's SMP Guidelines state that NRAs must impose one or more SMP conditions on a dominant provider, and that it would be inconsistent with the objectives of the Framework Directive not to impose any SMP conditions on an undertaking which has SMP. This creates a strong presumption that Ofcom should impose at least one appropriate SMP condition where SMP is confirmed.
- 5.4 The Act (sections 45-50 and 87-92) sets out what obligations Ofcom can impose if it finds that any undertaking has SMP. Sections 87 to 92 implement Articles 9 to 13 of the Access Directive and Articles 17 to 19 of the Universal Service Directive. The obligations relevant to this review are:
- The provision of network access on reasonable request;
 - No undue discrimination;
 - Transparency;
 - Basis of charges.
- 5.5 Recital 27 of the Framework Directive provides that ex-ante regulation should only be imposed where there is not effective competition and where competition law remedies are not sufficient to address the problem. In order to provide a full analysis, Ofcom has, therefore, also considered the option of no ex- ante regulation, and whether it would be sufficient to rely on competition law alone, while noting the presumption referred to in paragraph 5.3.
- 5.6 Section 4 of the Act sets out the Community duties on Ofcom which flow from Article 8 of the Framework Directive. Ofcom, in considering whether to propose any conditions has considered all of these requirements. In particular, it has considered the requirement to promote competition in relation to the provision of electronic communications networks, electronic communications services and associated facilities. Section 3 of the Act sets

out Ofcom's general duties and Ofcom has also taken these into consideration in this document, particular the desirability of promoting competition.

5.7 In addition, as well as being appropriate (see section 87(1)), each SMP condition must also satisfy the tests set out in section 47 of the Act, namely that each condition must be:

- objectively justifiable in relation to the networks, services or facilities to which it relates;
- not such as to discriminate unduly against particular persons or a particular description of persons;
- proportionate to what the condition is intended to achieve; and
- in relation to what it is intended to achieve, transparent.

5.8 It is Ofcom's view that the proposals contained in this section satisfy the relevant requirements specified in the Act and relevant European Directives and summarised in the ERG Common Position on Remedies³¹. This view is explained in detail in the following paragraphs.

Aims of the conditions being proposed

5.9 The purpose of regulation is to ensure that broadcasting transmission services may be secured on reasonable terms. Ultimately, this is to the benefit of viewers and listeners. Given the position of SMP that Ofcom has identified both in the markets for access to masts and sites and in the market for managed transmission services, there is a risk that, in the absence of regulation, the SMP players would exploit that market power restricting opportunities for market entry by raising prices for access to the relevant services above a competitive level or by supplying on terms inferior to those which could be expected in a competitive market.

Summary of regulation to be proposed

5.10 The following table provides a brief outline of how the different market levels and geographic markets interrelate with the proposed remedies:

| | National transmission | Regional transmission | Metropolitan transmission | Local transmission | Remedies |
|-----------------|--|------------------------------|----------------------------------|---------------------------|---|
| Access to sites | <i>Crown Castle and ntl have SMP in their respective markets</i> | | | <i>No SMP</i> | <i>FRND and cost-orientated prices, Reference offer</i> |
| MTS | <i>Crown Castle and ntl have joint SMP in national market</i> | <i>No SMP</i> | | | <i>FRND and cost-orientated prices</i> |

³¹ ERG Common Position on the approach to Appropriate remedies in the new regulatory framework, 1 April 2004

Proposals for regulation: markets for access to masts and sites for the purposes of national, regional and metropolitan terrestrial broadcasting

- 5.11 Ofcom considers that, given the purposed SMP status of ntl and Crown Castle in their respective markets for access to masts and sites, it is necessary to impose *ex ante* regulation upon the two providers of masts and sites for terrestrial broadcasting services.
- 5.12 Having considered the arguments raised during Oftel's consultation and summarised below, Ofcom proposes to impose a limited set of access obligations on the operators of the terrestrial masts and sites, ntl and Crown Castle. The obligations comprise:
- requirement to provide network access which has been reasonably requested on fair and reasonable terms;
 - requirement not to discriminate unduly;
 - requirement that charges should be reasonably related to costs of provision;
 - requirement to publish a reference offer.

These are broadly in line with Oftel's original proposals. The obligations will only apply within the market in which SMP has been identified, that is, the market for access to the masts and sites developed for the purpose of national, regional and metropolitan transmission. They apply to the extent necessary for the purposes of national, regional and metropolitan broadcasting transmission services, to deliver content to end users. Ofcom does not intend to regulate access to other masts and sites or to access provided for other purposes as these are likely to fall outside of the markets defined.

- 5.13 The term "network access" is very broadly defined in the Act. Without intending to limit the scope of the definition, in this context it means such access to the sites, masts and antenna systems (including where applicable, access to allow for the installation and maintenance of broadcast transmission equipment and related equipment and for the connection of such equipment to power and other essential services) as is necessary from time to time to enable a third party public electronic communications provider effectively to provide analogue and/or digital terrestrial broadcasting transmission services³². It would in particular cover the following services provided by site operators:
- access to allow for the installation and maintenance of broadcast transmission equipment and related equipment (or provision of access to permit installation by third parties);
 - access for the connection of such equipment to power and other essential services;

³² Under the terms of section 151(3) of the Act, the effect of imposing 'network access' obligations is that only those with a public electronic communications network or those providing an electronic communications service (ECS) can benefit from the obligations. Ofcom understands that the Commission, in including broadcasting transmission in its recommended list of markets suitable for *ex ante* regulation expected that the benefits of such regulation would flow ultimately to broadcasters. There is ongoing discussion around the definition of ECS as set out in the Directives and national legislation. Of course, this discussion is independent from the application of competition law to abuses of dominant position, such as refusal to supply on fair and reasonable terms.

- access to sites for the use or establishment of common or exclusive building accommodation;
 - access to and use of shared or shareable broadcast equipment comprising combiners, feeders, data lines, antennae, transmitters and self-contained equipment housing.
- 5.14 The reference offer will set out the terms on which services expected to be commonly provided are made available by the site operators to providers of managed transmission services. It does not represent an exhaustive list of the services which might be the subject of a reasonable request. Its purpose is to provide a sufficient degree of certainty to allow providers of managed transmission services to plan and run their businesses efficiently, while not preventing them from submitting bespoke requests or requesting additional services where circumstances suggest it. Any terms not covered by the reference offer would, in the first instance, be subject to commercial negotiation with a right for either party to bring a dispute about such terms to Ofcom for resolution.
- 5.15 The reference offer would make clear, amongst other things, the different charges to be applied for different elements of network access. Such charges should be cost-orientated. Ofcom considers that the historical costs included in Oftel's determination of the price control mechanism in 1996 may indicate an appropriate basis for cost-orientation but would ultimately judge any dispute on its merits. Where investments have been made after 2002 (the end of the period of Oftel's analysis) with respect to masts and other associated equipment, the relevant costs of such investment including a reasonable return on capital employed should be included.

Views of consultation respondents on Oftel's proposed remedies

- 5.16 A major concern expressed was that Ofcom would be finalising its remedies in the context of the Government planning for digital switch-over. Respondents stressed that regulatory certainty would be most important for digital switchover to progress smoothly and economically. Ofcom agrees that this is an important consideration and that this review of regulation is timely.
- 5.17 It was argued that at present the competition between ntl and Crown Castle already leads to downward pressure on prices and would guard against excessive pricing in the absence of *ex ante* remedies. However, Ofcom does note that such competition has taken place in an environment where regulation was already present on analogue transmission and consequently the possibility of the introduction of a similar regulation on digital would have deterred the transmission companies from charging excessive prices on the market for digital transmission. It is not possible to determine what would have occurred in the absence of existing regulation.
- 5.18 Some respondents noted the possibility of entry to the UK transmission market at the masts and sites layer by transmission companies from other EU member states, without any reciprocal right of entry being in place for UK transmission companies to compete elsewhere in the EU. Ofcom acknowledges this but does not consider that liberalisation of the market should be delayed by lack of reciprocal provisions in other member states. While Ofcom notes that an objective of the new regulatory regime is to

achieve a harmonised approach across the EU and will endeavour to achieve this where possible, it is also aware that member states have different arrangements for transmission, with many having vertically integrated operators and thus a very different market structure. This means that there may be different SMP remedies across member states, implying that different conditions may be attached to entry within each state.

- 5.19 It was suggested that there was no need to require any form of site sharing regulation (or access) as it was essential to ntl and Crown Castle's business to be able to offer a UK-wide service. However, site sharing – a regulatory obligation – might also be seen as a historical anomaly, and in the absence of regulated access to each others' sites, each company might offer transmission from its own sites at any price it chose. In addition, site sharing solely between ntl and Crown Castle of itself would not permit market entry from third parties which could promote effective competition downstream.
- 5.20 One respondent was concerned that an access obligation would allow third party operators to access high profile, profitable sites (e.g. those which serve large populations) and offer a service from those, leaving other smaller sites to be provided by the site owner. Ofcom's firm expectation is that national broadcasters would be keen to purchase managed transmission as a bundle, as at present, as their obligations extend nationwide. Indeed, the presence of nationwide broadcasting obligations would limit the ability of a third party operator to 'cherry-pick' the denser and more profitable sites.
- 5.21 The reference offer and what it should comprise was discussed at length by many respondents: in particular, whether the reference offer should also include services such as monitoring systems, transmitter combiners, feeder systems and antenna systems. A number of these services have large elements of bespoke provision. The combiner provides a useful illustrative example. In many cases, the reengineering required to incorporate an additional channel into an established combiner may be more costly and disruptive than installing a new discrete combiner. On the other hand, where a service provider had won a transmission contract from another service provider, it might be relatively straightforward to arrange for it to "inherit" its predecessor's rights of use to an existing shared combiner. The purpose of the reference offer is to set out terms of provision for those services which are generally provided on standard terms. It therefore supplements the general obligation to provide network access by providing transparency: the omission of a service from the reference offer should not be taken as an indication that it is not expected to be provided, rather that, if provided, the terms are likely in practice to require case-by-case negotiation. Equally, the fact that services are listed in the reference offer does not guarantee that it would be possible to supply them in every case; there may, for example, be genuine technical reasons why they cannot be supplied in a specific circumstance.

Specific issues raised by consultation respondents and stakeholders

- 5.22 A number of issues raised by respondents are covered by guidance previously issued by Oftel in its 2002 document "Imposing access obligations under the new Directives"³³("Access Guidelines") which Ofcom considers are relevant to its regulation of this market, although it should be noted that

³³ http://www.ofcom.org.uk/static/archive/oftel/publications/ind_guidelines/acce0902.htm

Ofcom intends to consult on new guidelines on non-discrimination later in 2004. Some further specific issues were raised. Ofcom considers that it would be helpful to the market players to give some very preliminary indications of how these matters might be interpreted in practice. These are set out in annex 8.

Treatment of existing contracts under the proposed regulations

- 5.23 Ofcom considers that to require all existing contracts to be renegotiated to match certain aspects of the proposed regulations would be disproportionate. In particular, the terms of the reference offer deal with the offer of access as provided from this point, and to require the providers to renegotiate existing, long-running contracts in order to match the newly-developed reference offer would be burdensome both upon the provider and their customers. This also applies to existing contracts with regard to cost-orientation and non-discrimination.
- 5.24 Ofcom therefore proposes to include specific provisions aimed at exempting existing transmission contracts from certain of the proposed obligations where those conditions *relate* to the provision of managed transmission services.
- 5.25 Ofcom also considers that to require analogue television contracts to comply with all aspects of the conditions proposed below would also be disproportionate. Ofcom has noted elsewhere in this document the fact that analogue television contracts are in place and have already been negotiated under legacy regulation. In addition, there are no uncertainties such as major investments on the horizon which would lend flux or uncertainty to analogue television contracting. Ofcom is therefore of the view that the provision of access to sites in order to provide analogue transmission should not be subject to a requirement to develop a reference offer. As such provision is under existing contracts and there are unlikely to be any new entrants given that it is unlikely that any spectrum would become available to be used for analogue television transmission, the development of a reference offer would not be a useful exercise. Ofcom is proposing that analogue television transmission need not be subject to undue discrimination or cost orientation obligations for the same reason.
- 5.26 Ofcom does however believe that the network access obligations (JA1, JB1 and JC1 below) should apply to existing contracts and to analogue television contracts, as the required service will be needed as sought by the customers.
- 5.27 Ofcom also believes that all new contracts must comply with the terms of the reference offer and the no undue discrimination and cost-orientation obligations, including where such contracts are a renewal, extension or material amendment of an existing contract. This is to ensure that any provision of managed transmission under new or revised contracts is provided on the terms covered by the proposed SMP conditions. Moreover, all access, whether covered by an existing access agreement or not, should be supplied on fair and reasonable terms.

Ofcom's views on regulation: market for access to masts and sites for the purpose of provision of national, regional and metropolitan broadcasting transmission services

- 5.28 Ofcom, having taking into consideration the views expressed in the September consultation, provisionally concludes that network access obligations should be imposed on ntl and Crown Castle in respect of their masts and sites, for the purposes of providing national, regional and metropolitan terrestrial transmission, to deliver broadcast content to end users.
- 5.29 The requirement to offer network access means that either ntl, Crown Castle, or third party public electronic communications providers would be able to enter the market for the provision of managed transmission services for broadcasting. This should serve to deter excessive pricing at the level of access to masts and sites (and otherwise promote reasonable terms of supply) and as a consequence may help to promote competition and prevent excessive prices in the downstream market for MTS.
- 5.30 The primary measures of success of these remedies is that access to masts and sites would be available on reasonable terms, without recourse to regulatory intervention. An additional measure of success would be if, over time, the market for managed transmission became more dynamic with more entrants (whether third parties or broadcasters self-supplying) becoming engaged in the market.
- 5.31 In the event of a dispute or complaint arising about charges for network access, Ofcom would aim to exercise the information-gathering powers in Article 5 of the Framework Directive or under competition legislation in order to collect information about underlying costs.

Specific conditions proposed to be applied to ntl and Crown Castle in relation to masts and sites

Requirement to provide network access on fair and reasonable terms which has been reasonably requested for the purposes of national, regional and metropolitan broadcasting transmission

- 5.32 Section 87(3) of the Act authorises the setting of SMP services conditions requiring the dominant providers (i.e. each of ntl and Crown Castle) to provide Network Access as Ofcom may from time to time direct. These conditions may, pursuant to section 87(5), include provision for securing fairness and reasonableness in the way in which requests for Network Access are made and responded to and for securing that the obligations in the conditions are complied with within periods and at times required by or under the conditions. When considering the imposition of such conditions in a particular case, Ofcom must have regard to the six factors set out in section 87(4) of the Act, including, inter alia, the technical and economic viability of the proposed Network Access.
- 5.33 This aims to address the problem outlined in section 4: that ntl and Crown Castle have SMP in the market for access to their respective networks for terrestrial broadcasting transmission. As discussed, market entry into these

markets would be daunting and unlikely at this time – there are substantial barriers to entry. Ofcom proposes that the obligation be framed in terms of the dominant provider being required to provide Network Access to its network to Third Parties on reasonable request. Network Access is a fairly broad term and is defined in sections 151(3) and (4) of the Act. Third Party has been defined as a person providing a public electronic communications network or a public electronic communications services. Accordingly, any party that is not a provider of an ECN or an ECS may not get regulated access. Any party seeking access to ntl and Crown Castle's masts would be doing so in order to provide terrestrial broadcasting transmission services (an ECS).

- 5.34 Under this condition, Ofcom has the power to make directions. It is envisaged that this power would be used, where appropriate, to deal with issues relating to specific forms of Network Access or the particular terms and conditions on which Network Access is provided. This condition requires the dominant providers to comply with any such direction. Any contravention of a direction may therefore result in a contravention of the condition itself and thus be subject to enforcement action under sections 94 – 104 of the Act.
- 5.35 Further guidance as to how Ofcom proposes to apply the Network Access obligation may be found in *Imposing access obligations under the new EU Directives* September 2002 ("the Access Guidelines") which may be found at http://www.ofcom.org.uk/static/archive/oftel/publications/ind_guidelines/acce0902.htm although Ofcom is currently considering its own guidelines on discrimination, on which it intends to consult shortly.
- 5.36 Unlike the other conditions proposed for these markets and discussed below, this condition will apply to all access provided within these markets, whether provided under the terms of existing agreements or new contracts.

Communication Act tests

- 5.37 Ofcom considers that the condition (condition JA1 and JB1 for ntl and Crown Castle respectively, at annex 4) meets the tests set out in the Act.
- 5.38 Ofcom has considered its duties under section 3 and all the Community requirements set out in section 4 of the Act. In particular, the condition is aimed at promoting competition in downstream markets by opening up access to the masts and sites network, and securing efficient and sustainable competition for the maximum benefits for end users; by mitigating the SMP held by ntl and Crown Castle as discussed in section 4 of this document.
- 5.39 Section 47 requires that conditions be objectively justifiable, non-discriminatory, proportionate and transparent.
- 5.40 This condition would require ntl and Crown Castle to provide access to their masts and sites to providers of electronic communications networks (ECN) and electronic communications services (ECS) for the purposes of terrestrial broadcasting transmission on reasonable request. This aims to address the problem that there is a very limited choice of masts and sites (none at all for national television transmission) from which providers of managed transmission services may secure transmission for terrestrial broadcasters. The scope of the requirement is proportionate as it has been carefully drawn to address the networks of masts and sites for which Ofcom believes there

are no effective substitutes. For television broadcasting, the lists of sites appended to broadcasters' obligations effectively set out an indicative list of the sites to which the obligation should attach. With regard to national, regional and metropolitan radio broadcasting, there are differences. Ofcom is aware that there is likely to be substitutability for smaller masts and towers and that broadcasting may take place from sites which have not been acquired, constructed or installed for that purpose. It is likely in such cases that an access obligation would be disproportionate. Also, a key aspect of transmission which leads to radio broadcasters having limited or no choice as to which mast and site are used is transmission strength and therefore Ofcom has sought to distinguish between the different types of sites to which the access obligation should be attached for radio broadcasting: the obligation should attach to sites acquired, constructed or installed for the purpose of broadcasting, and to those sites which either exceed 50m in height or from which radio transmissions exceed 2kW e.r.p. Thus the obligation relates specifically to the market where SMP has been identified and allows access to be denied where a request is not reasonable. In these respects Ofcom considers the proposed condition to be objectively justifiable. It does not discriminate against non-terrestrial transmission methods as those are alternative means to secure transmission, and it is transparent as it applies to the specific area where SMP is held, and will lead to the production of a reference offer which makes clear to all what is on offer.

- 5.41 The requirement upon ntl and Crown Castle to provide network access on fair and reasonable terms guards against ntl and Crown Castle using their SMP to raise prices to an excessive level or to supply on terms inferior to those which would be available in a competitive market. The ERG Common Position on Remedies notes that conditions covering fairness and reasonableness may be particularly useful to protect against strategies aimed at restricting access such as excessive costs. It is proportionate as it is addressed specifically to the market where SMP resides. It does not preclude ntl and Crown Castle from differentiating in price (e.g. for bundled services) where such differentiation may be objectively justified.
- 5.42 Section 87(4) of the Act requires that Ofcom take into account the technical feasibility of the provision of a network access requirement. The network access requirement being proposed for each of ntl and Crown Castle is broadly akin to that already provided by those companies to each other under their present site sharing agreement and thus the technical feasibility of offering the network access should not be in doubt. In addition, in line with section 87(4)(d), Ofcom considers that the requirement to provide of network access in this upstream market is important in order to secure effective competition in the long term in the downstream market.

Requirement not to unduly discriminate

- 5.43 Section 87(6)(a) of the Act authorises the setting of an SMP services condition requiring the dominant provider not to unduly discriminate against particular persons, or against a particular description of persons, in relation to matters connected with the provision of Network Access.
- 5.44 Where providers with SMP are vertically integrated, like ntl and Crown Castle, there are incentives for them to provide wholesale services on terms and conditions that discriminate in favour of any downstream activities in such a way as to have an effect on competition. In particular, there are incentives to

charge competing providers more for inputs than the amount charged to any downstream arms thereby increasing the costs of competing providers and providing themselves with an unfair competitive advantage. They might also provide services on different terms and conditions, for example with different delivery timescales, which would disadvantage competing providers and in turn consumers.

- 5.45 A requirement not to unduly discriminate is intended, principally, to prevent dominant providers from discriminating in favour of their own downstream activities and to ensure that competing providers are placed in an equivalent position to their downstream arms.
- 5.46 A prohibition of discrimination might have disadvantages if it prevented discrimination that was economically efficient or justified. However, the proposed condition provides that there should be no undue discrimination. Ofcom's Access Guidelines note that the application of a condition prohibiting undue discrimination does not mean that there should not be any differences in treatment between undertakings, rather that any differences should be objectively justifiable, for example, by differences in underlying costs of supplying different undertakings. The Access Guidelines, however, also note that there is a rebuttable presumption that a vertically integrated SMP operator discriminating in favour of its own downstream activities or between its own different activities would have an effect on competition (paragraph 3.9). As already noted, Ofcom intends to consult on its non-discrimination guidelines shortly.
- 5.47 Ofcom therefore proposes to apply a non-discrimination obligation in the market for access to the masts and sites of each of ntl and Crown Castle for the purpose of national, regional and metropolitan broadcasting in which each of ntl and Crown Castle have been proposed as having SMP. This accords with Recital 17 of the Access Directive, which states that non-discrimination obligations ensure that undertakings with market power do not distort competition, in particular where they are vertically integrated undertakings that supply inputs to their own downstream provision.
- 5.48 For the reasons described in paragraphs 5.23 – 5.27, Ofcom considers that the non-discrimination requirement should not apply in respect of access granted under existing access agreements for the purpose of fulfilling existing managed transmission contracts.
- 5.49 Ofcom considered whether it would be appropriate to time-limit this exemption but is of the view that it is not necessary. It will become otiose in due course, as the existing contracts expire. In the meantime, purchasers under new contracts are fully protected by the conditions summarised in 5.12.

Communication Act tests

- 5.50 Ofcom considers that the condition (conditions JA2 and JB2 for ntl and Crown Castle respectively at annex 4) meets the tests set out in the Act.
- 5.51 Ofcom has considered its duties under section 3 and all the Community requirements set out in section 4 of the Act. In particular the condition is aimed at promoting competition and securing efficient and sustainable competition for the maximum benefit of end users by promoting competition in downstream markets for terrestrial broadcasting transmission.

5.52 Section 47 requires that conditions be objectively justifiable, non-discriminatory, proportionate and transparent. This condition would require ntl and Crown Castle not to unduly discriminate when providing access to their masts and sites for the purpose of terrestrial broadcasting. This is an objectively justifiable requirement as both ntl and Crown Castle are proposed to be jointly dominant in the provision of the downstream market for managed transmission services on a national basis. It ensures that all ECS and ECN providers obtaining access will be treated in a broadly equivalent manner. It is proportionate as it does not preclude differential pricing where such differentiation may be objectively justified. It does not unduly discriminate as it applies only to those operators found to have SMP and its scope is limited by the extent of the SMP. It is transparent because the condition is clearly explained here and set out in annex 4.

Requirement that charges for network access be reasonably derived from the costs of provision

5.53 Section 87(9) authorises the setting of SMP service conditions imposing rules regarding the recovery of costs and cost orientation on dominant providers.

5.54 In a competitive market, the pricing of services on the basis of the commercial judgements of individual companies could be expected to deliver cost-reflective pricing. However, where competition cannot be expected to provide effective pricing constraints, ex-ante regulation is desirable to prevent excessive pricing. Such intervention should also have as its objective the aim of moving the market towards a position where effective competition is realised. Where the competition problem arises at an upstream stage in the production chain, it is likely to be appropriate to regulate the pricing of wholesale inputs, in order to allow effective competition to develop in downstream markets, rather than control downstream prices themselves.

5.55 In markets where competition is not effective, dominant providers are likely to set excessive prices, in order to maximise their profits and, where the dominant provider is vertically integrated, to increase the costs of competing providers. Higher wholesale charges are likely to mean higher prices downstream and competing providers being less able to compete with the vertically dominant provider in the downstream market. In the long-term this may result in market exit.

5.56 Ofcom considers that the historical costs included in Oftel's determination of the price control mechanism in 1996³⁴ may indicate an appropriate basis for cost-orientation but would ultimately judge any dispute on its merits. Where investments have been made after 2002 (the end of the period of the determination) with respect to masts and associated equipment, the relevant costs of such investment including a reasonable return on capital employed and depreciation should be included.

5.57 For the reasons described in 5.23 – 5.27, Ofcom considers that the cost-orientation requirement should not apply in respect of access granted under existing access agreements for the purpose of fulfilling existing transmission contracts. As in 5.49, Ofcom considers it unnecessary to time-limit this exemption.

³⁴ http://www.ofcom.org.uk/static/archive/oftel/publications/1995_98/pricing/ntlfinal.htm and http://www.ofcom.org.uk/static/archive/oftel/publications/1995_98/broadcasting/terrest/intro.htm

Communication Act tests

- 5.58 Ofcom considers that the condition (Conditions JA3 and JB3 for ntl and Crown Castle respectively, at annex 4) meets the tests set out in the Act. Ofcom has considered all its duties under section 3 and all the Community requirements set out in section 4 of the Act. In particular, the condition is aimed at promoting competition and securing efficient and sustainable competition for the maximum benefit of end users by ensuring that charges for upstream inputs are set at a level that enables competition to develop downstream.
- 5.59 Section 47 requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. This condition would require ntl and Crown Castle to provide network access on terms that were related to the costs of their provision, to avoid the risk of excessive pricing in the downstream market. The objective justification for this is that it guards against ntl and Crown Castle raising prices to levels that were not reflective of costs and offers a means to investigate such prices in the event of necessary regulatory intervention. It is proportionate as it is confined to the specific area of Crown Castle and ntl's SMP at this level of the market. It ensures that ntl and Crown Castle may allow for the realistic costs of provision to be accounted for when setting prices. It does not itself unduly discriminate as it applies solely to Crown Castle and ntl and does not exclude them from making flexible pricing decisions where objectively justified. It is transparent as there is clear comfort for electronic communications providers that they can counter the providers' respective SMP with an appeal to the regulator in the event of a complaint.
- 5.60 Ofcom considers that the tests in section 88 of the Act have been met. As noted above, there is a risk that in situations where SMP is persistent, pricing will be distorted and above the competitive level, as dominant providers are likely to want to charge excessive prices in order to maximise profits and increase the costs of competitors, or deter potential competitors. The condition is appropriate in order to promote efficiency and sustainable competition and provide the greatest possible benefits to end users by enabling downstream providers to buy upstream inputs at levels that might be expected in a competitive market.
- 5.61 The extent of investment of the dominant provider has been taken into account as set out in section 88(2), as the obligation provides for an appropriate return on capital to be included in the charges.

Transparency

- 5.62 Section 87(6)(b) of the Act authorises the setting of SMP services conditions which require a dominant provider to publish all such information, and in such manner as Ofcom may direct, for the purpose of securing transparency. Section 87(6)(c) of the Act authorises the setting of SMP services conditions requiring the dominant provider to publish, in such manner as Ofcom may direct, the terms and conditions on which it is willing to enter into an access contract. Section 87(6)(d) also permits the setting of SMP services conditions requiring the dominant provider to include specified terms and conditions into the reference offer. Finally, section 87(6)(e) permits the setting of SMP services conditions requiring the dominant provider to make such modifications to the reference offer as may be directed from time to time.

- 5.63 This section considers the transparency requirement to publish a reference offer.

Requirement to publish a reference offer

- 5.64 A requirement to publish a reference offer has two main purposes, namely, to assist transparency for the monitoring of potential anti-competitive behaviour and to give visibility to the terms and conditions on which other providers will purchase upstream inputs. This helps to ensure stability in markets and, without it, incentives to invest might be undermined and market entry be less likely.
- 5.65 The publication of a reference will potentially allow for speedier negotiations, avoid possible disputes and give confidence to those purchasing wholesale services that they are being provided on non-discriminatory terms. Without this, market entry might be deterred to the detriment of the long-term development of competition and hence end users.
- 5.66 The condition requires the publication of a reference offer and specifies the information to be included in that reference offer (set out below) and how the reference offer should be published. It prohibits the dominant provider from departing from the charges, terms and conditions in the reference offer and requires it to comply with any directions Ofcom may make from time to time under the condition.
- 5.67 The published reference offer should set out:
- a clear description of the services on offer;
 - terms and conditions including charges and ordering, provisioning, billing and dispute resolution procedures;
 - information relating to technical issues; and
 - conditions relating to maintenance and quality (service level agreements ("SLAs") and service level guarantees ("SLGs"));
 - conditions for site access; and
 - safety standards.
- 5.68 A reference offer would enable an ECS or ECN provider seeking access to have available a transparent account of what may be obtained, and on what terms. It gives effect to the network access condition. As noted in the ERG Common Position on Remedies, a reference offer can be a means to achieve transparency and can make access and other obligations more effective. It would be difficult for network access to be obtained without being clear about what is involved and in particular, difficult for any potential new entrants to fully inform themselves about how access shall operate and thus to develop their business plan. It is available to any provider of ECN or ECS and thus aids the likelihood of competition developing in the market. It is proportionate as it may, if they so choose be developed from ntl and Crown Castle's existing site sharing agreement ratecard. The ERG Common Position on Remedies also suggests that, where practicable, remedies should be designed to be incentive-compatible. Ofcom is of the view that developing a

reference offer to encourage customers to use networks is likely to be an effective way for the providers to maximise the use of their assets, in both regulated and unregulated fields.

- 5.69 For the reasons described in 5.23 – 5.27, Ofcom considers that the requirement to publish a reference offer should not apply in respect of access granted under existing access agreements for the purpose of fulfilling existing transmission contracts. As in 5.49, Ofcom considers it unnecessary to time-limit this exemption.

Communications Act tests

- 5.70 Ofcom considers that this condition (Conditions JA4 and JB4 for ntl and Crown Castle, respectively, at annex 4) meets the tests set out in the Act.
- 5.71 Ofcom has considered its duties under section 3 and all the Community requirements set out in section 4 of the Act. In particular, the condition is aimed at promoting competition and securing efficient and sustainable competition for the maximum benefits of consumers by ensuring that providers have the necessary information to allow them to make informed decisions about purchasing upstream inputs in order to enter and compete in downstream markets.
- 5.72 Section 47 requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The condition is objectively justifiable in that it requires that terms and conditions are published in order to encourage competition and provide stability in markets. It is proportionate, as only information that is considered necessary to allow providers to make informed decisions about competing in downstream markets is required to be provided. In addition, ntl and Crown Castle already operate a 'reference offer' type arrangement through their site sharing agreement, from which it may be logical to evolve their reference offer. It does not unduly discriminate as it is applied to both ntl and Crown Castle and no other provider has SMP in these markets. Finally, it is transparent in that it is clear in its intention to ensure that ntl and Crown Castle publish details of how their upstream inputs should be made available.

Proposals for regulation: market for national managed transmission services

- 5.73 For the reasons set out below, Ofcom considers that, given the proposed joint SMP status of ntl and Crown Castle in this market, it is necessary to impose *ex ante* regulation upon the two providers of national managed transmission services for terrestrial broadcasting.
- 5.74 Ofcom proposes to require ntl and Crown Castle to provide network access in the market for managed transmission services. In addition, Ofcom proposes additional obligations to provide that network access on fair, reasonable, cost-orientated and non-discriminatory terms. These conditions are described in more detail below.
- 5.75 In the event of a complaint or dispute arising about pricing or terms, Ofcom would aim to exercise any available information-gathering powers in Article 5

of the Framework Directive or under the competition legislation to gather the necessary information, for example about underlying costs.

Views of consultation respondents on regulation of managed transmission services

- 5.76 Oftel did not formally identify this market as one considered for regulation and consequently did not propose any remedies. Nevertheless, stakeholders did provide significant comments. As with the remedies for access to masts and sites outline above, a major concern for stakeholders was that Ofcom would be finalising its Market Review in the context of the Government planning for digital switch-over. Respondents were particularly concerned that with the pressure for digital switchover that the transmission providers would be in a particular position of strength. Given the present need to negotiate and secure DTT roll-out in a timely way, a backstop power to intervene in the provision of a fully managed transmission service was felt to be necessary in order to effectively mitigate the positions of market power.
- 5.77 Several respondents were sceptical about the likelihood of network access to deliver effective competition in the market for managed transmission services. Ofcom notes that the economic barriers to entry into this market are considerable and that there had been limited interest in entry in practice. The broadcasters themselves were cautious about market entry as this was not their core competence. Ofcom does take the view that competition has delivered improved services and lower prices across a range of telecommunications services and that there was no apparent reason why the broadcasting markets should be an exception. Ofcom also notes that other respondents took the view that the possibility of market entry from transmission providers in other member states was realistic. Ofcom's initial view is that the possibility of new entry was insufficiently strong in this market to mitigate the current position of SMP held jointly by ntl and Crown Castle although provision of other types of managed transmission services by independent service providers should be perfectly feasible.
- 5.78 Nevertheless, taking all factors into account, Ofcom believes that the proportionate approach to remedies in the market for managed transmission services is light touch. The obligation to provide services on cost-orientated, fair, reasonable and non-discriminatory terms provides a good degree of certainty within the market. The possibility of third party entry, albeit that the prospects do not appear very good at this time, will place some competitive pressure on ntl and Crown Castle. If in practice this proves insufficient to guard against the threat of exploitation, Ofcom has the power to resolve disputes between the providers of managed transmission services and communications provider or to investigate where appropriate any anti-competitive behaviour under competition legislation. As the ERG Common Position notes, even the best-designed remedies may take a period of time to take effect and that the short-term exercise of market power must be controlled to ensure that the objectives of regulation are not frustrated.
- 5.79 Ofcom has of course limited the obligation to national services rather than regional, metropolitan or local services, reflecting its respective assessment of SMP. It considers that the remedies in the upstream market should be sufficient in practice to mitigate concerns about exercise of market power in provision of regional, metropolitan or local managed transmission services. If

problems arose in practice, it would reconsider whether regional, metropolitan or local managed transmission services were in practice competitively supplied. If not, a further SMP designation and appropriate SMP remedies would be considered.

- 5.80 The issue of the leverage of market power by ntl and Crown Castle into unregulated areas was raised in response to the September consultation. Ofcom believes that many of these services are already being provided in some cases by other parties (e.g. transmission of content from studios to sites, some aspects of maintenance), however, that a large element of the managed transmission service remains in-house with ntl and Crown Castle. As noted in section 4, ntl and Crown Castle have built up expertise, equipment and maintenance systems which entrants may not easily be able to match. Ofcom notes that other respondents felt that the risk of losing work in unregulated areas was an incentive for the providers to avoid excessive pricing in regulated areas. However Ofcom believes that this may not offer sufficient risk to the provider to avoid their engaging in excessive pricing because of the limited countervailing buyer power for MTS and is of the view that the potential for regulatory intervention should extend beyond merely access to masts and sites. This leads to Ofcom's proposal to define and impose remedies in the downstream MTS market.

Specific conditions proposed to be applied to ntl and Crown Castle

- 5.81 Ofcom proposes three conditions, as set out below.

Requirement to provide network access in the market for national managed transmission services on fair and reasonable terms, those services which are reasonably requested.

- 5.82 Section 87(3) of the Act authorises the setting of SMP services conditions requiring the dominant providers (i.e. each of ntl and Crown Castle) to provide Network Access as Ofcom may from time to time direct. These conditions may, pursuant to section 87(5), include provision for securing fairness and reasonableness in the way in which requests for Network Access are made and responded to and for securing that the obligations in the conditions are complied with within periods and at times required by or under the conditions. When considering the imposition of such conditions in a particular case, Ofcom must have regard to the six factors set out in section 87(4) of the Act, including, inter alia, the technical and economic viability of the proposed Network Access.
- 5.83 This aims to address the problem outlined in section 4: that ntl and Crown Castle have a long expertise and incumbency in the provision of national MTS such that market entry would be daunting and unlikely into that market at this time. Ofcom proposes that the obligation be framed in terms of the dominant provider being required to provide Network Access to its network to Third Parties on reasonable request. Network Access is a fairly broad term and is defined in sections 151(3) and (4) of the Act. Third Party has been defined as a person providing a public electronic communications network or a public electronic communications services. Accordingly, any party that is not a provider of an ECN or an ECS may not get regulated access.

- 5.84 Under this condition, Ofcom has the power to make directions. It is envisaged that this power would be used, where appropriate, to deal with issues relating to specific forms of Network Access or the particular terms and conditions on which Network Access is provided. This condition requires the dominant providers to comply with any such direction. Any contravention of a direction may therefore result in a contravention of the condition itself and thus be subject to enforcement action under sections 94 – 104 of the Act.
- 5.85 Further guidance as to how Ofcom proposes to apply the Network Access obligation may be found in Imposing access obligations under the new EU Directives September 2002 (“the Access Guidelines”) which may be found at http://www.ofcom.org.uk/static/archive/oftel/publications/ind_guidelines/acce0902.htm. Although as already noted, Ofcom intends to consult on its own discrimination guidelines shortly.
- 5.86 It is proposed that the condition applies to the market for managed transmission services for national terrestrial broadcasting transmission in which ntl and Crown Castle have been proposed jointly to have SMP.

Communications Act tests

- 5.87 Ofcom considers that the condition (condition JC1 for ntl and Crown Castle, at annex 4) meets the tests set out in the Act.
- 5.88 Ofcom has considered its duties under section 3 and all the Community requirements set out in section 4 of the Act. In particular, the condition is aimed at promoting competition and securing efficient and sustainable competition for the maximum benefits for end users by mitigating the SMP held by ntl and Crown Castle.
- 5.89 Section 47 requires that conditions be objectively justifiable, non-discriminatory, proportionate and transparent. This condition is objectively justifiable as the alternative is to leave the market exposed to the risk of exploitative terms, conditions and charges by SMP undertakings. It does not discriminate unduly against particular persons as it solely applies to ntl and Crown Castle in the realms in which they hold SMP and does not discriminate in relation to local, metropolitan and regional broadcasting as SMP has not been found in the provision of local, metropolitan and regional MTS.
- 5.90 In a similar way, this condition is proportionate in that it is limited in scope to the services most likely to benefit from *ex ante* regulation. The network access condition to be applied to masts and sites (5.32 – 5.42) requires the development of a reference offer for those services. However Ofcom believes that to require a reference offer in the market for MTS would be both burdensome and at variance with the reality of how MTS is provided. This condition is also proportionate as Ofcom is not seeking to propose the prices which should be charged in this area.
- 5.91 This proposed condition is transparent in what it is intended to achieve as it clearly outlines the area in which SMP resides and where remedies need to mitigate that SMP but transparently fits with the aspirations of the conditions applied at the upper level of the market: that the market aspiration should be to increase competitiveness and market entry at the upper levels.

- 5.92 Section 87(4) of the Act requires that Ofcom take into account the technical feasibility of the provision of a network access requirement. The network access requirement being proposed jointly for ntl and Crown Castle would require them to provide network access in a similar way to that already being provided, but now on regulated terms. Its technical feasibility is not likely to be questionable.

Requirement not to unduly discriminate

- 5.93 Section 87(6)(a) of the Act authorises the setting of an SMP services condition requiring the dominant provider not to unduly discriminate against particular persons, or against a particular description of persons, in relation to matters connected with the provision of Network Access.
- 5.94 A requirement to not unduly discriminate between other providers where it is not objectively justified principally aims to prevent the dominant provider from distorting competition between providers, and to ensure that competition providers are placed in an equivalent position to each other.
- 5.95 A prohibition of discrimination might have disadvantages if it prevented discrimination that was economically efficient or justified. However, the proposed condition provides that there should be no undue discrimination. Oftel's Access Guidelines note that the application of a condition prohibiting undue discrimination does not mean that there should not be any differences in treatment between undertakings, rather that any differences should be objectively justifiable, for example, by differences in underlying costs of supplying different undertakings. The Access Guidelines also state that obligations of non-discrimination should ensure that the provider applies equivalent conditions in equivalent circumstances to other undertakings providing equivalent services. A requirement not to unduly discriminate between other providers where it is not objectively justified by cost or other circumstances, principally seeks to prevent the dominant provider from distorting competition between downstream providers and to ensure that competing downstream providers are placed in equivalent positions to each other.
- 5.96 Ofcom therefore proposes to apply a non-discrimination obligation in the market for provision of managed transmission services for national broadcasting. This accords with Recital 17 of the Access and Interconnection Directive, which states that non discrimination obligations ensure that undertakings with market power do not distort competition.
- 5.97 For the reasons described in 5.23 – 5.27, Ofcom considers that the no undue discrimination requirement should not apply in respect of access granted under existing access agreements for the purpose of fulfilling existing managed transmission contracts. As in 5.49, Ofcom considers it unnecessary to time-limit this exemption.

Communications Act tests

- 5.98 Ofcom considers that the condition (Condition JC2 for ntl and Crown Castle, at annex 4) meets the tests set out in the Act.
- 5.99 Ofcom has considered its duties under section 3 and all the Community requirements set out in section 4 of the Act. In particular, the condition is aimed at promoting competition and securing efficient and sustainable competition for the maximum benefit of consumers.
- 5.100 Section 47 requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. Ofcom considers that this condition is objectively justifiable as it ensures that ntl and Crown Castle may not exploit their SMP. It does not itself unduly discriminate against any provider as it serves to ensure that all providers are treated fairly by the SMP providers. It is proportionate as it does not preclude ntl and Crown Castle from offering differentiated prices and terms where such measures may be objectively justifiable (e.g. volume discounts) and it is transparent in what it seeks to achieve as it serves to clearly act against any potential discrimination that might have an adverse effect on competition.

Requirement that charges for provision of managed transmission service be reasonably derived from the cost of provision

- 5.101 Section 87(9) authorises the setting of SMP service conditions imposing rules regarding the recovery of costs and cost orientation on dominant providers.
- 5.102 In a competitive market, the pricing of services on the basis of the commercial judgements of individual companies could be expected to deliver cost-reflective pricing. However, where competition cannot be expected to provide effective pricing constraints, ex-ante regulation is desirable to prevent excessive pricing. Such intervention should also have as its objective the aim of moving the market towards a position where effective competition is realised. Where the competition problem arises at an upstream stage in the production chain, it is likely to be appropriate to regulate the pricing of wholesale inputs, in order to allow effective competition to develop in downstream markets, rather than control downstream prices themselves. However, in this market competition problems have been identified at both the upstream and downstream levels of the market and thus remedies need to be considered at both levels.
- 5.103 In markets where competition is not effective, dominant providers are likely to set excessive prices, in order to maximise their profits and, where the dominant provider is vertically integrated, to increase the costs of competing providers. Higher wholesale charges are likely to mean higher prices downstream and competing providers being less able to compete in the downstream market. In the long-term this may result in market exit downstream.
- 5.104 Ofcom does not propose to set charges in advance, whether by price cap or otherwise. Nevertheless, it may have to make a direction on the matter in a case where a communications provider was dissatisfied that the terms offered were not cost-orientated. In such a case, Ofcom would consider whether the

supplier's prospective rate of return was within a reasonable range. This would be a range consistent with that which would be expected to be achieved in a competitive market, taking full account of the level and nature of investments undertaken and commercial risks borne.

- 5.105 Ofcom's preliminary view is that the most appropriate basis for setting the charges for the services in the market for managed transmission services for the purpose of national broadcasting is based on the historical costs included in Oftel's determination of the price control mechanism in 1996³⁵. Where investments have been made after 2002 (the end of the period of the determination), the relevant costs of such investment including a reasonable return on capital employed and depreciation should be included.
- 5.106 For the reasons described in 5.23 – 5.27, Ofcom considers that the cost-orientation requirement should not apply in respect of access granted under existing access agreements for the purpose of fulfilling existing managed transmission contracts. As in 5.49, Ofcom considers it unnecessary to time-limit this exemption.

Communication Act tests

- 5.107 Ofcom considers that the condition (Condition JC3 for ntl and Crown Castle, at annex 4) meets the tests set out in the Act. Ofcom has considered all its duties under section 3 and all the Community requirements set out in section 4 of the Act. In particular, the condition is aimed at promoting competition and securing efficient and sustainable competition for the maximum benefit of end users by ensuring that charges for upstream inputs are set at a level that enables competition to develop downstream.
- 5.108 Section 47 requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. This condition would require ntl and Crown Castle to provide network access on terms that were related to the costs of their provision, to avoid the risk of excessive pricing in the downstream market. The objective justification for this is that it guards against ntl and Crown Castle raising prices to levels that were not reflective of costs and offers a means to investigate such prices in the event of necessary regulatory intervention. It is proportionate as it is confined to the specific area of Crown Castle and ntl's SMP at this level of the market. It ensures that ntl and Crown Castle may allow for the realistic costs of provision to be accounted for when setting prices. It does not itself unduly discriminate as it applies solely to Crown Castle and ntl and does not exclude them from making flexible pricing decisions where objectively justified. It is transparent as there clearly outlines the areas where the providers shall be expected to provide on cost-orientated terms and will give assurance that such terms should be offered.
- 5.109 Ofcom considers that the tests in section 88 have been met. As noted above, there is a risk that in situations where SMP is persistent, pricing will be distorted and above the competitive level, as dominant providers are likely to want to charge excessive prices in order to maximise profits and increase the costs of competitors, or deter potential competitors. The condition is

³⁵ http://www.ofcom.org.uk/static/archive/oftel/publications/1995_98/pricing/ntlfinal.htm and http://www.ofcom.org.uk/static/archive/oftel/publications/1995_98/broadcasting/terrest/intro.htm

appropriate in order to promote efficiency and sustainable competition and provide the greatest possible benefits to end users by enabling retail providers to buy inputs at levels that might be expected in a competitive market.

- 5.110 The extent of investment of the dominant provider has been taken into account as set out in section 88(2), as the obligation provides for an appropriate return on capital to be included in the charges.

Section 6

Responding to this consultation

- 6.1 Ofcom is publishing the Notification at Annex 4 to allow interested parties, and the European Commission and other national regulatory authorities, to make any representations. After considering any such representations, Ofcom will, if appropriate, give effect to these proposals by publishing a further and final notification.

How to respond

- 6.2 Ofcom invites written views and comments on the issues raised in this document, to be made by **5pm on Wednesday 22 December 2004**.
- 6.3 Ofcom strongly prefers to receive responses as e-mail attachments, in Microsoft Word format, as this helps us to process the responses quickly and efficiently. We would also be grateful if you could assist us by completing a response cover sheet (see below), among other things to indicate whether or not there are confidentiality issues. The cover sheet can be downloaded from the 'Consultations' section of our website.
- 6.4 Please can you send your response to margaret.doherty@ofcom.org.uk. Responses may alternatively be posted or faxed to the address below, marked with the title of the consultation.:

Margaret Doherty
Competition and Markets
4th Floor
Ofcom
Riverside House
2a Southwark Bridge Road
London
SE1 9HA

Tel: 020 7783 4160
Fax: 020 7783 4109

Note that we do not need a hard copy in addition to an electronic version. Also note that Ofcom will not routinely acknowledge receipt of responses.

- 6.5 If you have any queries about this consultation or need guidance on the appropriate form of response or have any other query, please call our consultation helpdesk on 020 7981 3003 during working hours. Ofcom is keen to make responding to consultations easy and we will endeavour to give appropriate support and advice.

Confidentiality

- 6.6 Ofcom thinks it is important for everyone interested in an issue to see the views expressed by consultation respondents. We will therefore usually publish all responses on our website, www.ofcom.org.uk, ideally on receipt

(when respondents confirm on their response cover sheet that this is acceptable).

- 6.7 All comments will be treated as non-confidential unless respondents specify that part or all of the response is confidential and should not be disclosed. Please place any confidential parts of a response in a separate annex, so that non-confidential parts may be published along with the respondent's identity.
- 6.8 Ofcom reserves its power to disclose certain confidential information where this is necessary to fulfil its functions, although in practice it would do so only in limited circumstances.
- 6.9 Please also note that copyright and all other intellectual property in responses will be assumed to be assigned to Ofcom unless specifically retained.

Next steps

- 6.10 Following the end of the consultation period, Ofcom intends to publish a statement confirming its regulatory approach.
- 6.11 Please note that you can register to get automatic notifications of when Ofcom documents are published, at http://www.ofcom.org.uk/static/subscribe/select_list.htm.

Annex 1

Ofcom's consultation principles

Ofcom has committed to meeting the seven tests for consultations set out below:

Before the consultation

1. *Hold discussions with stakeholders before issuing a major consultation document – so that Ofcom's thinking is subject to an early sense-test. If this is not possible, an open meeting to explain the proposals will be held soon after publication.*

The proposals in this consultation document have already been the subject of a full national consultation, and have been discussed fully with stakeholders both during the preparation of the original proposals and further to the issue of that consultation document.

During the consultation

2. *Be clear about who is being consulted, why, on what questions and for how long.*

This is a public consultation to which anyone can respond. However, the primary targets of this consultation are the EC Commission and other EU member states' national regulatory authorities. It will also be of particular relevance to terrestrial broadcasters and providers of transmission services.

3. *Make the document as simple and concise as possible – with a summary of no more than 2 pages – and make it easy to respond to. This may involve issuing a shorter version aimed at hard-to-reach groups, like SMEs.*

A summary of this document is provided in section 1.

4. *Allow 10 weeks for responses, other than on dispute resolution.*

In order to avoid the consultation period being disrupted by the Christmas/New Year break, Ofcom decided it was sensible to conclude the consultation before that and has therefore decided to hold a slightly shorter consultation. The major UK stakeholders have already been informally consulted upon the proposals in this document.

5. *Analyse responses with care and an open mind. This involves giving reasons for subsequent decisions, and an account of the views expressed.*

Unless respondents specifically request confidentiality, we shall publish all responses, or a summary of them as appropriate, on our website. Ofcom will also address the points raised when issuing the final version of its proposals.

6. *Monitor and evaluate consultations, and designate a consultation champion – an evangelist within Ofcom for better consultation and reach out, and a contact point*

for comments on our process.

In the first instance, respondents with any comments on the consultation process are invited to contact Margaret Doherty (contact details in section 6). However, if you do not get a satisfactory response, or would like to make points applying generally to the way in which Ofcom carries out consultations, please contact Philip Rutnam, Partner, Competition and Strategic Resources by email at philip.rutnam@ofcom.org.uk or by telephone on 020 7981 3585.

After the consultation

7. *Explain why Ofcom is departing from any of these tests if it has to – for example, because of urgency or confidentiality. If a shorter period is required, Ofcom will draw this to the attention of stakeholders, as a red flag item.*

The departure from these tests is noted at paragraph 4 above.

Annex 2

Consultation response cover sheet

- A2.1 In the interests of transparency, we will publish all consultation responses in full on our website, www.ofcom.org.uk, unless a respondent specifies that all or part of their response is confidential. We will also refer to the contents of a response when explaining our decision, unless we are asked not to.
- A2.2 We have produced a cover sheet for responses (see below) and would be very grateful if you could send one with your response. This will speed up our processing of responses, and help to maintain confidentiality by allowing you to state very clearly what you don't want to be published. We will keep your completed cover sheets confidential.
- A2.3 The quality of consultation can be enhanced by publishing responses before the consultation period closes. In particular, this can help those individuals and organisations with limited resources or familiarity with the issues to respond in a more informed way. Therefore Ofcom would encourage respondents to confirm on the response cover sheet that Ofcom can publish their responses upon receipt.
- A2.4 We strongly prefer to receive responses in the form of a Microsoft Word attachment to an email. Our website therefore includes an electronic copy of this cover sheet, which you can download from the 'Consultations' section of our website.
- A2.5 Please put any confidential parts of your response in a separate annex to your response, so that they are clearly identified. This can include information such as your personal background and experience. If you want your name, contact details, or job title to remain confidential, please provide them in your cover sheet only so that we don't have to edit your response.

Cover sheet for response to an Ofcom consultation

BASIC DETAILS

Consultation title:

To (Ofcom contact):

Name of respondent:

Representing (self or organisation/s):

Address (if not received by email):

CONFIDENTIALITY

What do you want Ofcom to keep confidential?

Nothing

Name/contact details/
job title

Whole response

Organisation

Part of the response

If there is no separate annex, which parts?

If you want part of your response, your name or your organisation to be confidential, can Ofcom still publish a reference to the contents of your response (including, for any confidential parts, a general summary that does not disclose the specific information or enable you to be identified)?

Yes

No

DECLARATION

I confirm that the correspondence supplied with this cover sheet is a formal consultation response. It can be published in full on Ofcom's website, unless otherwise specified on this cover sheet, and all intellectual property rights in the response vest with Ofcom. If I have sent my response by email, Ofcom can disregard any standard email text about not disclosing email contents and attachments.

Ofcom can publish my response: on receipt once the consultation ends

Name

Signed (if hard copy)

Annex 3

List of representations received in response to the first consultation

Non confidential responses

BBC
Chris Dale
Crown Castle
ntl
Scottish Advisory Council on Telecommunications

Confidential responses

ITV, Channel 4 and D3&4
SDN Limited

Annex 4

Notification of proposals for the identification of markets, the making of market power determinations and the setting of SMP services conditions

NOTIFICATION UNDER SECTIONS 48(2) AND 80 OF THE COMMUNICATIONS ACT 2003

Proposals for the identification of markets, the making of market power determinations and the setting of SMP services conditions in relation to ntl and Crown Castle

1. Ofcom in accordance with sections 48(2) and 80 of the Communications Act 2003 ('the Act') hereby make the following proposals for identifying markets, making market power determinations and the setting of SMP services conditions by reference to such determinations ("SMP conditions").
2. Ofcom are proposing to identify the following markets for the purpose of making market power determinations:

Masts and sites

- a) the provision of access to the mast and site network and shared or shareable antenna systems acquired, constructed or installed by ntl for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver broadcast content to end users on a National, Regional or Metropolitan basis;
- b) the provision of access to the mast and site network and shared or shareable antenna systems acquired, constructed or installed by Crown Castle for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver broadcast content to end users on a National, Regional or Metropolitan basis;
- c) the provision of access to the mast and site network and shared or shareable antenna systems other than those masts, site networks and shared or shareable antenna systems acquired, constructed or installed by ntl or Crown Castle for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver broadcast content to end users on a National, Regional or Metropolitan basis;

Managed transmission services

- d) the provision of terrestrial managed transmission service for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver a National Broadcast Service;
- e) the provision of terrestrial managed transmission service for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services within the United Kingdom, to deliver other than a National Broadcast Service;

3. Ofcom are proposing to make market power determinations that the following persons have significant market power in relation to the markets referred to in paragraph 2 above:

- a) in relation to the market set out at paragraph 2(a), ntl;
- b) in relation to the market set out at paragraph 2(b), Crown Castle;
- c) in relation to the market set out at paragraph 2(d), ntl and Crown Castle;

4. Ofcom are proposing to make market power determinations that no person has significant market power in relation to the markets referred to in paragraph 2(c) and 2(e) above.

5. Ofcom are proposing to set SMP services conditions on the persons referred to in paragraph 3(a), 3(b) and 3(c) above as set out in Schedules 1, 2 and 3, respectively, to this Notification.

6. The effect of the proposals referred to in paragraphs 2, 3, 4 and 5 above is set out in section 5 respectively of the explanatory statement published with this Notification.

7. Ofcom's reasons for making the proposals referred to in paragraphs 2, 3, 4 and 5 above is set out in sections 2 and 3 respectively of the explanatory statement published with this Notification.

8. In identifying and analysing the markets referred to in paragraph 2 above, and in considering whether to make the proposals set out in this Notification, Ofcom have taken due account of all applicable guidelines and recommendations which have been issued or made by the European Commission in pursuance of a Community instrument, and relate to market identification or analysis, as required by section 79 of the Act.

9. Ofcom consider that the proposed SMP services conditions referred to in paragraph 5 above comply with the requirements of sections 45 to 50 and sections 78 to 92 of the Act, as appropriate and relevant to each such SMP services condition.

10. In making all of the proposals referred to in paragraphs 2, 3, 4 and 5 of this Notification Ofcom have considered and acted in accordance with the six Community requirements in section 4 of the Act and their duties in section 3 of the Act.

11. Representations may be made to Ofcom about the proposals set out in this Notification and the accompanying explanatory statement by 22 December 2004.

12. Copies of this Notification and the accompanying explanatory statement have been sent to the Secretary of State in accordance with section 50(1)(a), the European Commission and to the regulatory authorities of every other member State in accordance with sections 50(3) and 81 of the Act.

13. Save for the purposes of paragraph 2 of this Notification and except as otherwise defined in this Notification, words or expressions used shall have the same meaning

as in the Act, or if a word or expression has no meaning there, it shall have the same meaning as in the Broadcasting Act 1990.

14. In this Notification:

- a) "Crown Castle" means Crown Castle UK Limited whose registered company number is 03196207 including any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 736 of the Companies Act 1985, as amended by the Companies Act 1989;
- b) "National Broadcast Service" means the delivery of content to end users by means of all or any of the following:
 - (i) a National Radio Multiplex Service licensed under Part II of the Broadcasting Act 1996;
 - (ii) a national Sound Broadcasting Service licensed under Part III of the Broadcasting Act 1990;
 - (iii) a Television Multiplex Service licensed under Part I of the Broadcasting Act 1996; and
 - (iv) a Public Service Broadcaster, as defined in section 271(8) of the Act;
- c) "National, Regional or Metropolitan" means either or both of:
 - (i) transmission of national television; and
 - (ii) transmission of signals at or above a power level of 2 kW e.r.p.;
- d) "ntl" means National Transcommunications Limited whose registered company number is 02487597 including any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 736 of the Companies Act 1985, as amended by the Companies Act 1989;
- e) "Ofcom" means the Office of Communications as established pursuant to section 1(1) of the Office of Communications Act 2002;
- f) "United Kingdom" has the meaning given to it in the Interpretation Act 1978.



JIM NIBLETT
Competition Policy Director

A person authorised by Ofcom under paragraph 18 of the Schedule to the Office of Communications Act 2002

10 November 2004

SCHEDULE 1

The conditions imposed on ntl under sections 45, 87 and 88 of the Communications Act 2003 as a result of the analysis of the market for the provision of access to the mast and site network and shared or shareable antenna systems acquired, constructed or installed by ntl for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services in the United Kingdom, to deliver content to end users on a National, Regional or Metropolitan basis in which ntl has been found to have significant market power

Part 1: Definitions and Interpretation of these conditions

1. These conditions shall apply to the market for the provision of access to the mast and site network and shared or shareable antenna systems acquired, constructed or installed by ntl for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services in the United Kingdom, to deliver content to end users on a National, Regional or Metropolitan basis.
2. Conditions JA2, JA3 and JA4 shall not apply to the provision of Network Access pursuant to a contract or arrangement for the provision of analogue television terrestrial managed transmission services.
3. Conditions JA2, JA3 and JA4 shall not apply to the provision of Network Access pursuant to a contract or arrangement which existed at the date these conditions entered into force for the provision of all other terrestrial managed transmission services.
4. Paragraph 3 shall not apply to any renewal, extension or material amendment of terms which existed at the date these conditions entered into force and which relate to the requirement to provide digital transmission services and analogue radio transmission services.
5. For the purpose of interpreting the conditions imposed on the Dominant Provider following a review of the market referred to in paragraph 1 the following definitions shall apply:

“Act” means the Communications Act 2003;

“Dominant Provider” means National Transcommunications Limited, whose registered company number is 02487597, and any National Transcommunications Limited subsidiary or holding company, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

“National, Regional or Metropolitan” means either or both of:

- (i) transmission of national television; and
- (ii) transmission of signals at or above a power level of 2 KW e.r.p. transmitted;

“Ofcom” means the Office of Communications as established pursuant to section 1(1) of the Office of Communications Act 2002;

“Reference Offer” means the terms and conditions on which the Dominant Provider is willing to enter into an Access Contract.

“Third Party” means a person providing a public Electronic Communications Service or a person providing a public Electronic Communications Network.

6. Except insofar as the context otherwise requires, words or expressions shall have the meaning assigned to them and otherwise any word or expression shall have the same meaning as it has in the Act.
7. The Interpretation Act 1978 shall apply as if each of the conditions were an Act of Parliament.
8. Headings and titles shall be disregarded.

Part 2: The conditions

Condition JA1 – Requirement to provide network access on reasonable request

JA1.1 Where a Third Party reasonably requests in writing Network Access, the Dominant Provider shall provide that Network Access. The Dominant Provider shall also provide such Network Access as Ofcom may from time to time direct.

JA1.2 The provision of Network Access in accordance with paragraph 1 shall occur as soon as reasonably practicable and shall be provided on fair and reasonable terms, conditions and charges and on such terms, conditions and charges as Ofcom may from time to time direct.

JA1.3 The Dominant Provider shall comply with any direction Ofcom may make from time to time under this Condition.

Condition JA2 – Requirement not to unduly discriminate

JA2.1 The Dominant Provider shall not unduly discriminate against particular persons or against a particular description of persons, in relation to matters connected with Network Access.

JA2.2 In this Condition, the Dominant Provider may be deemed to have shown undue discrimination if it unfairly favours to a material extent an activity carried on by it so as to place at a competitive disadvantage persons competing with the Dominant Provider.

Condition JA3 – Basis of charges

JA3.1 Unless Ofcom direct otherwise from time to time, the Dominant Provider shall secure, and shall be able to demonstrate to the satisfaction of Ofcom, that each and every charge offered, payable or proposed for Network Access covered by Condition JA1 is reasonably derived from the costs of provision and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed.

JA3.2 The Dominant Provider shall comply with any direction Ofcom may from time to time direct under this Condition.

Condition JA4 – Requirement to publish a reference offer

JA4.1 Except in so far as Ofcom may otherwise consent in writing, the Dominant Provider shall publish a Reference Offer and act in the manner set out below.

JA4.2 Subject to paragraph 7 below, the Dominant Provider shall ensure that a Reference Offer in relation to the provision of Network Access includes at least the following:

JA4.2.1 In relation to the provision of Network Access for the purposes of the delivery of content to end users by means of a Television Multiplex Service licensed under Part I of the Broadcasting Act 1996:

- (a) a description of the Network Access to be provided, including technical characteristics (which shall include information on network configuration where necessary to make effective use of the Network Access);
- (b) the locations of the points of Network Access; and
- (c) relevant charges, terms of payment and billing procedures;

JA4.2.2 In relation to the provision of Network Access for the purposes of delivery of content to end users other than by means of a Television Multiplex Service licensed under Part I of the Broadcasting Act 1996 a statement of the principles and methodology which the Dominant Provider will apply in order to determine the matters referred to in Condition JA4.2.1;

JA4.2.3 In relation to the provision of Network Access:

- (a) the technical standards for Network Access (including any usage restrictions and other security issues);
- (b) the conditions for access to ancillary, supplementary and advanced services (including operational support systems, information systems or databases for pre-ordering, provisioning, ordering, maintenance and repair requests and billing);

- (c) any ordering and provisioning procedures;
- (d) details of maintenance and quality as follows:
 - (i) specific time scales for the acceptance or refusal of a request for supply and for completion, testing and hand-over or delivery of services and facilities, for provision of support services (such as fault handling and repair);
 - (ii) service level commitments, namely the quality standards that each party must meet when performing its contractual obligations;
 - (iii) the amount of compensation payable by one party to another for failure to perform contractual commitments;
 - (iv) a definition and limitation of liability and indemnity; and
 - (v) procedures in the event of alterations being proposed to the service offerings, for example, launch of new services, changes to existing services or change to prices;
- (e) a dispute resolution procedure to be used between the parties;
- (f) details of duration and renegotiation of agreements;
- (g) provisions regarding confidentiality of non-public parts of the agreements;
- (h) rules of allocation between the parties when supply is limited (for example, for the purpose of co-location or location of masts); and
- (i) the standard terms and conditions for the provision of Network Access.

JA4.3 To the extent that the Dominant Provider provides to itself Network Access that:

- (i) is the same, similar or equivalent to that provided to any other person; or

- (ii) may be used for a purpose that is the same, similar or equivalent to that provided to any other person,

in a manner that differs from that detailed in a Reference Offer in relation to Network Access provided to any other person, the Dominant Provider shall ensure that it publishes a Reference Offer in relation to the Network Access that it provides to itself which includes, where relevant, at least those matters detailed in Condition JA4.2.1 to JA4.2.3.

JA4.4 The Dominant Provider shall publish a Reference Offer:

- (i) in relation to Network Access for the purposes of the delivery of content to end users by a Public Service Broadcaster, by 28 February 2005;
- (ii) in relation to Network Access for the purposes of the delivery of content to end users other than by a Public Service Broadcaster, by 29 April 2005;

JA4.5 The Dominant Provider shall update and publish the Reference Offer in relation to any amendments or in relation to any further Network Access provided after the date this Condition enters into force.

JA4.6 Publication referred to above shall be effected by:

- (a) placing a copy of the Reference Offer on any relevant website operated or controlled by the Dominant Provider; and
- (b) sending a copy of the Reference Offer to Ofcom.

JA4.7 The Dominant Provider shall send a copy of the current version of the Reference Offer to any person at that person's written request (or such parts which have been requested).

JA4.8 The Dominant Provider shall make such modifications to the Reference Offer as Ofcom may direct from time to time.

JA4.9 The Dominant Provider shall provide Network Access at the charges, terms and conditions in the relevant Reference Offer and shall not depart therefrom either directly or indirectly.

JA4.10 The Dominant Provider shall comply with any direction Ofcom may make from time to time under this Condition.

SCHEDULE 2

The conditions imposed on Crown Castle under sections 45, 87 and 88 of the Communications Act 2003 as a result of the analysis of the market for the provision of access to the mast and site network and shared or shareable antenna systems acquired, constructed or installed by Crown Castle for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services in the United Kingdom, to deliver content to end users on a National, Regional or Metropolitan basis in which Crown Castle has been found to have significant market power

Part 1: Definitions and Interpretation of these conditions

1. These conditions shall apply to the market for the provision of access to the mast and site network and shared or shareable antenna systems acquired, constructed or installed by Crown Castle for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services in the United Kingdom, to deliver content to end users on a National, Regional or Metropolitan basis.
2. Conditions JB2, JB3 and JB4 shall not apply to the provision of Network Access pursuant to a contract or arrangement for the provision of analogue television terrestrial managed transmission services.
3. Conditions JB2, JB3 and JB4 shall not apply to the provision of Network Access pursuant to a contract or arrangement which existed at the date these conditions entered into force for the provision of all other terrestrial managed transmission services.
4. Paragraph 3 shall not apply to any renewal, extension or material amendment of terms which existed at the date these conditions entered into force and which relate to the requirement to provide digital transmission services and analogue radio transmission services.
5. For the purpose of interpreting the conditions imposed on the Dominant Provider following a review of the market referred to in paragraph 1 the following definitions shall apply:

“Act” means the Communications Act 2003;

“Dominant Provider” means Crown Castle UK Limited, whose registered company number is 03196207, and any Crown Castle UK Limited subsidiary or holding company, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

“National, Regional or Metropolitan” means either or both of:

- (i) transmission of national television; and
- (ii) transmission of signals at or above a power level of 2 KW e.r.p.;

“Ofcom” means the Office of Communications as established pursuant to section 1(1) of the Office of Communications Act 2002;

“Reference Offer” means the terms and conditions on which the Dominant Provider is willing to enter into an Access Contract.

“Third Party” means a person providing a public Electronic Communications Service or a person providing a public Electronic Communications Network.

“United Kingdom” has the meaning given to it in the Interpretation Act 1978.

6. Save for the purposes of paragraphs 1 to 4 of this Schedule and except insofar as otherwise defined in this Schedule, words or expressions used shall have the same meaning as in the Act.
7. The Interpretation Act 1978 shall apply as if each of the conditions were an Act of Parliament.
8. Headings and titles shall be disregarded.

Part 2: The conditions

Condition JB1 – Requirement to provide network access on reasonable request

JB1.1 Where a Third Party reasonably requests in writing Network Access, the Dominant Provider shall provide that Network Access. The Dominant Provider shall also provide such Network Access as Ofcom may from time to time direct.

JB1.2 The provision of Network Access in accordance with paragraph 1 shall occur as soon as reasonably practicable and shall be provided on fair and reasonable terms, conditions and charges and on such terms, conditions and charges as Ofcom may from time to time direct.

JB1.3 The Dominant Provider shall comply with any direction Ofcom may make from time to time under this Condition.

Condition JB2 – Requirement not to unduly discriminate

JB2.1 The Dominant Provider shall not unduly discriminate against particular persons or against a particular description of persons, in relation to matters connected with Network Access.

JB2.2 In this Condition, the Dominant Provider may be deemed to have shown undue discrimination if it unfairly favours to a material extent an activity carried on by it so as to place at a competitive disadvantage persons competing with the Dominant Provider.

Condition JB3 – Basis of charges

JB3.1 Unless Ofcom direct otherwise from time to time, the Dominant Provider shall secure, and shall be able to demonstrate to the satisfaction of Ofcom, that each and every charge offered, payable or proposed for Network Access covered by Condition JB1 is reasonably derived from the costs of provision and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed.

JB3.2 The Dominant Provider shall comply with any direction Ofcom may from time to time direct under this Condition.

Condition JB4 – Requirement to publish a reference offer

JB4.1 Except in so far as Ofcom may otherwise consent in writing, the Dominant Provider shall publish a Reference Offer and act in the manner set out below.

JB4.2 Subject to paragraph 7 below, the Dominant Provider shall ensure that a Reference Offer in relation to the provision of Network Access includes at least the following:

JB4.2.1 In relation to the provision of Network Access for the purposes of the delivery of content to end users by means of a Television Multiplex Service licensed under Part I of the Broadcasting Act 1996:

- (a) a description of the Network Access to be provided, including technical characteristics (which shall include information on network configuration where necessary to make effective use of the Network Access);
- (b) the locations of the points of Network Access; and
- (c) relevant charges, terms of payment and billing procedures;

JB4.2.2 In relation to the provision of Network Access for the purposes of the delivery of content to end users other than by means of a Television Multiplex Service licensed under Part I of the Broadcasting Act 1996 a statement of the principles and methodology which the Dominant Provider will apply in order to determine the matters referred to in Condition JB4.2.1;

JB4.2.3 In relation to the provision of Network Access:

- (a) the technical standards for Network Access (including any usage restrictions and other security issues);
- (b) the conditions for access to ancillary, supplementary and advanced services (including operational support systems, information systems or databases for pre-ordering, provisioning, ordering, maintenance and repair requests and billing);

(c) any ordering and provisioning procedures;

(d) details of maintenance and quality as follows:

- (i) specific time scales for the acceptance or refusal of a request for supply and for completion, testing and hand-over or delivery of services and facilities, for provision of support services (such as fault handling and repair);
- (ii) service level commitments, namely the quality standards that each party must meet when performing its contractual obligations;
- (iii) the amount of compensation payable by one party to another for failure to perform contractual commitments;
- (iv) a definition and limitation of liability and indemnity; and
- (v) procedures in the event of alterations being proposed to the service offerings, for example, launch of new services, changes to existing services or change to prices;

(e) a dispute resolution procedure to be used between the parties;

(f) details of duration and renegotiation of agreements;

(g) provisions regarding confidentiality of non-public parts of the agreements;

(h) rules of allocation between the parties when supply is limited (for example, for the purpose of co-location or location of masts); and

(i) the standard terms and conditions for the provision of Network Access.

JB4.3 To the extent that the Dominant Provider provides to itself Network Access that:

- (j) is the same, similar or equivalent to that provided to any other person; or

- (iii) may be used for a purpose that is the same, similar or equivalent to that provided to any other person,

in a manner that differs from that detailed in a Reference Offer in relation to Network Access provided to any other person, the Dominant Provider shall ensure that it publishes a Reference Offer in relation to the Network Access that it provides to itself which includes, where relevant, at least those matters detailed in Condition JB4.2.1 to JB4.2.3

JB4.4 The Dominant Provider shall publish a Reference Offer:

- (i) in relation to Network Access for the purposes of the delivery of content to end users by a Public Service Broadcaster, by 28 February 2005;
- (ii) in relation to Network Access for the purposes of the delivery of content to end users other than by a Public Service Broadcaster, by 29 April 2005;

JB4.5 The Dominant Provider shall update and publish the Reference Offer in relation to any amendments or in relation to any further Network Access provided after the date this Condition enters into force.

JB4.6 Publication referred to above shall be effected by:

- (c) placing a copy of the Reference Offer on any relevant website operated or controlled by the Dominant Provider; and
- (d) sending a copy of the Reference Offer to Ofcom.

JB4.7 The Dominant Provider shall send a copy of the current version of the Reference Offer to any person at that person's written request (or such parts which have been requested).

JB4.8 The Dominant Provider shall make such modifications to the Reference Offer as Ofcom may direct from time to time.

JB4.9 The Dominant Provider shall provide Network Access at the charges, terms and conditions in the relevant Reference Offer and shall not depart therefrom either directly or indirectly.

JB4.10 The Dominant Provider shall comply with any direction Ofcom may make from time to time under this Condition.

SCHEDULE 3

The conditions imposed on ntl and Crown Castle under sections 45, 87 and 88 of the Communications Act 2003 as a result of the analysis of the market the provision of terrestrial managed transmission service for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services in the United Kingdom, to deliver a National Broadcast Service in which ntl and Crown Castle have been found to have significant market power

Part 1: Definitions and Interpretation of these conditions

1. These conditions shall apply to the market the provision of terrestrial managed transmission service for the purpose of providing analogue and/or digital terrestrial broadcasting transmission services in the United Kingdom, to deliver a National Broadcast Service;
2. Conditions JC2 and JC3 shall not apply to the provision of Network Access pursuant to a contract or arrangement for the provision of analogue television terrestrial managed transmission services.
3. Conditions JC2 and JC3 shall not apply to the provision of Network Access pursuant to a contract or arrangement which existed at the date these conditions entered into force for the provision of all other terrestrial managed transmission services.
4. Paragraph 3 shall not apply to any renewal, extension or material amendment of terms which existed at the date these conditions entered into force and which relate to the requirement to provide digital transmission services and analogue radio transmission services.
5. For the purpose of interpreting the conditions imposed on the Dominant Provider following a review of the market referred to in paragraph 1 the following definitions shall apply:

“Act” means the Communications Act 2003;

“Dominant Provider” means each of National Transcommunications Limited, whose registered company number is 02487597, and Crown Castle UK Limited whose registered company number is 03196207 as appropriate and any National Transcommunications Limited or Crown Castle UK Limited, respectively, subsidiary or holding company, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989;

“National Broadcast Service” means the delivery of content to end users by means of all or any of the following:

- (i) a National Radio Multiplex Service licensed under Part II of the Broadcasting Act 1996;

- (ii) a national Sound Broadcasting Service licensed under Part III of the Broadcasting Act 1990;
- (iii) a Television Multiplex Service licensed under Part I of the Broadcasting Act 1996; and
- (iv) a Public Service Broadcaster, as defined in section 271(8) of the Act;

“Ofcom” means the Office of Communications as established pursuant to section 1(1) of the Office of Communications Act 2002;

“Third Party” means a person providing a public Electronic Communications Service or a person providing a public Electronic Communications Network;

“United Kingdom” has the meaning given to it in the Interpretation Act 1978.

6. Save for the purposes of paragraphs 1 to 4 of this Schedule and except as otherwise defined in this Schedule, words or expressions used shall have the same meaning as in the Act, or if a word or expression has no meaning there, it shall have the same meaning as in the Broadcasting Act 1990..
7. The Interpretation Act 1978 shall apply as if each of the conditions were an Act of Parliament.
8. Headings and titles shall be disregarded.

Part 2: The conditions

Condition JC1 – Requirement to provide network access on reasonable request

JC1.1 Where a Third Party reasonably requests in writing Network Access, the Dominant Provider shall provide that Network Access. The Dominant Provider shall also provide such Network Access as Ofcom may from time to time direct.

JC1.2 The provision of Network Access in accordance with paragraph 1 shall occur as soon as reasonably practicable and shall be provided on fair and reasonable terms, conditions and charges and on such terms, conditions and charges as Ofcom may from time to time direct.

JC1.3 The Dominant Provider shall comply with any direction Ofcom may make from time to time under this Condition.

Condition JC2 – Requirement not to unduly discriminate

JC2.1 The Dominant Provider shall not unduly discriminate against particular persons or against a particular description of persons, in relation to matters connected with Network Access.

JC2.2 In this Condition, the Dominant Provider may be deemed to have shown undue discrimination if it unfairly favours to a material extent an activity carried on by it so as to place at a competitive disadvantage persons competing with the Dominant Provider.

Condition JC3 – Basis of charges

JC3.1 Unless Ofcom direct otherwise from time to time, the Dominant Provider shall secure, and shall be able to demonstrate to the satisfaction of Ofcom, that each and every charge offered, payable or proposed for Network Access covered by Condition JC1 is reasonably derived from the costs of provision and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed.

JC3.2 The Dominant Provider shall comply with any direction Ofcom may from time to time direct under this Condition.

Annex 5

Discontinuation Notices

[DRAFT] NOTICE TO NATIONAL TRANSCOMMUNICATIONS LTD UNDER PARAGRAPH 9 OF SCHEDULE 18 TO THE COMMUNICATIONS ACT 2003

Notice that the continued provisions set out in the continuation notice given to National Transcommunications Ltd on 23 July 2003 will cease to have effect from [.....]

1. The Office of Communications ('OFCOM'), in accordance with Paragraph 9(9) of Schedule 18 to the Communications Act 2003 ('the Act') hereby give notice to National Transcommunications Ltd ('ntl') that all of the continued provisions contained in Schedule 1 to the continuation notice given to ntl on 23 July 2003, which had effect from 25 July 2003, ('the Continuation Notice'), will cease to have effect from [.....] ('the Discontinued Provisions').

2. In giving this notice, the Ofcom have, in accordance with Paragraph 9 (11) of Schedule 18 to the Act, taken all steps necessary for enabling them to decide whether or not to set a condition under Chapter 1 of Part 2 of the Act for the purpose of replacing the continued provisions and whether or not to exercise their power to set a condition under that Chapter for that purpose.

3. All directions, determinations, consents and other provisions which were continued under the Continuation Notice by virtue of Paragraph 9(8) of Schedule 18 to the Act will also cease to have effect from [.....] to the extent that they were given or made for the purposes of the Discontinued Provisions.

5. Ofcom consulted on its proposals to discontinue the Discontinued Provisions on 10 November 2004 in the consultation document entitled 'Broadcasting transmission services: a review of the market' and requested comments by 22 December 2004. Ofcom have taken into account the comments it received during that consultation.

6. In this notice, except as otherwise provided or unless the context otherwise requires, words or expressions shall have the meaning assigned to them and otherwise any word or expression shall have the same meaning as it has in the Act. For the purposes of interpreting this notice, headings and titles shall be disregarded.

JIM NIBLETT
Competition Policy Director

[Date]

**[DRAFT] NOTICE TO CROWN CASTLE UK LIMITED UNDER
PARAGRAPH 9 OF SCHEDULE 18 TO THE COMMUNICATIONS ACT 2003**

Notice that the continued provisions set out in the continuation notice given to Crown Castle UK Limited on 23 July 2003 will cease to have effect from [.....]

1. The Office of Communications ('OFCOM'), in accordance with Paragraph 9(9) of Schedule 18 to the Communications Act 2003 ('the Act') hereby give notice to Crown Castle UK Limited ('Crown Castle') that all of the continued provisions contained in Schedule 1 to the continuation notice given to Crown Castle on 23 July 2003, which had effect from 25 July 2003, ('the Continuation Notice'), will cease to have effect from [.....] ('the Discontinued Provisions').

2. In giving this notice, the Ofcom have, in accordance with Paragraph 9 (11) of Schedule 18 to the Act, taken all steps necessary for enabling them to decide whether or not to set a condition under Chapter 1 of Part 2 of the Act for the purpose of replacing the continued provisions and whether or not to exercise their power to set a condition under that Chapter for that purpose.

3. All directions, determinations, consents and other provisions which were continued under the Continuation Notice by virtue of Paragraph 9(8) of Schedule 18 to the Act will also cease to have effect from [.....] to the extent that they were given or made for the purposes of the Discontinued Provisions.

5. Ofcom consulted on its proposals to discontinue the Discontinued Provisions on 10 November 2004 in the consultation document entitled 'Broadcasting transmission services: a review of the market' and requested comments by 22 December 2004. Ofcom have taken into account the comments it received during that consultation.

6. In this notice, except as otherwise provided or unless the context otherwise requires, words or expressions shall have the meaning assigned to them and otherwise any word or expression shall have the same meaning as it has in the Act. For the purposes of interpreting this notice, headings and titles shall be disregarded.

JIM NIBLETT
Competition Policy Director

[Date]

Annex 6

Regulatory Impact Assessment

The issue that Ofcom needs to address

- A6.1 Under the 2002 EU Regulatory Framework for Electronic Communications, national regulators – for the UK, Ofcom – are obliged to conduct reviews of the state of competition in a range of communications markets and, where they find Significant Market Power (SMP), to propose regulatory remedies. Oftel conducted a national consultation on broadcasting transmission services September – November 2003. Ofcom is now at the point where it needs to conduct a further consultation (including the European Commission and other national regulators) under the terms of Art 7 of the Framework Directive before finalising its market review.
- A6.2 These regulatory proposals seek to further the interests of consumers by promoting competition in the market for broadcast transmission services to end users. In line with Ofcom's principles, they aim to reduce regulation in this market, seek to ensure that such regulatory interventions as are proposed are evidence based and proportionate, and with extensive informal and formal consultation they fit with Ofcom's principles of consulting widely and assessing regulatory impact. This review primarily fits with Ofcom's values of being commercially aware and of stakeholder engagement.
- A6.3 As noted in sections 3 and 4, Ofcom proposes that ntl and Crown Castle have SMP in access to their respective masts and sites for national, regional and metropolitan broadcasting, and joint SMP in their provision of national terrestrial television managed transmission services. In the light of this, Ofcom believes that there is a risk of exploitation of this SMP to the detriment of the provision of such services, or to the terms and conditions under which such services are provided. Were this to arise, this would conflict with Ofcom's mission to further the interests of citizen-consumers as there would be a detrimental effect downstream in terms of the resources available to be devoted to programming. Viewers and listeners may not through their buying decisions bring influence to bear in such a way as to mitigate excessive pricing: there remain the need to procure terrestrial transmission. Therefore a small but significant, non-transitory increase in price of either access to masts and sites, or managed transmission services by ntl or Crown Castle, cannot currently be mitigated through, for example, use of an alternative transmission mode such as satellite or cable. In addition, the existence of SMP at the level of access to masts and sites, when the remedy of network access at that level is applied, should aid the promotion of competition through allowing the potential for market entry at the downstream level of managed transmission services for both television and radio.

Comparison of the regulatory options available

No *ex ante* regulation

- A6.4 As an effectively competitive market will produce a more efficient outcome than a regulated market, the promotion of competition is central to Ofcom's mission to further the interests of citizen-consumers. Where markets are capable of being effectively competitive, *ex post* competition law is sufficient

to deal with such competition abuses that may arise. However, without the imposition of *ex ante* regulations to promote competition in markets that are not effectively competitive, it is unlikely that *ex post* powers would be sufficient to ensure that effective competition became established. Given ntl and Crown Castle's SMP, Ofcom's view is that there is merit in retaining some form of regulation, offering the ability for communications providers to appeal to Ofcom in the event of negotiations not arriving at satisfactory prices, terms and conditions. The crucial issue with terrestrial transmission is the limited choices available to purchasers of transmission, owing to their transmission obligations and the lack of ability of end-users to undermine price rises through changing viewing behaviour. Whereas it might be argued that the absence of regulation would encourage further market entry at the MTS level and innovation by ntl and Crown Castle also at the MTS level; however, without access obligations any market entry is not guaranteed, and should market entry not emerge regulation at the MTS remains important. Therefore, Ofcom considers that it is necessary to apply some *ex ante* regulation to this market.

Requiring access to transmission masts and sites on cost-orientated; fair, reasonable and non-discriminatory and transparent terms for the purpose of national, regional and metropolitan broadcasting.

- A6.5 Ofcom published guidelines for how it would impose access obligations upon operators with SMP (http://www.ofcom.org.uk/static/archive/oftel/publications/ind_guidelines/acce0902.pdf). Obligations covered by the guidelines would only be imposed on market players designated with SMP following a market review undertaken in accordance with the 2002 EU Regulatory Framework.
- A6.6 In most such cases, Ofcom imposes access obligations in the form of an obligation to meet all *reasonable requests* for access from providers of public electronic communications networks or services. Ofcom may also require operators to set out terms and conditions in a *reference offer* which gives the information potential purchasers of access need to determine whether they want to enter the market and make the commercial decision to do so. The guidelines explain how Ofcom would assess whether a request is reasonable, whether the terms (including non-price terms such as service level agreements and provision times) are reasonable and what should be included in the reference offer.
- A6.7 For transmission, ntl and Crown Castle have been proposed as having SMP in their respective geographical markets for access to masts and sites for the purposes of national, regional and metropolitan broadcasting. Imposing an access obligation upon both companies to meet all reasonable requests for access might be a means to mitigate the risk of a detrimental effect upon UK end-users. This could also open up alternative potential routes for transmission, with broadcasters having available to them the options of self-supplying from the transmission companies' sites, or of third party providers entering the market to supply.
- A6.8 Both ntl and Crown Castle each have approximately 50% market share each of the markets for providing access to the masts and sites used for national, regional and metropolitan analogue and digital terrestrial transmission. However, in light of the proposed access obligations there should be ease of

entry into the market. If the proposed remedies are confirmed, it should be possible for anyone wishing to provide terrestrial transmission from sites to have access to the Crown Castle and ntl masts and sites. This form of provision already takes place in the market for local radio transmission. Ofcom considers that the realistic possibility of entry, with cost based prices for access, into this market will restrict Crown Castle and ntl's ability to increase prices beyond the competitive level and mitigate the risks associated with SMP. Ofcom has sought to confine the proposed regulation as appropriate: hence its proposal that the regulation of access to sites for local broadcasting should not be subject to regulation – evidence suggests that the market for access to sites for local broadcasting tends towards greater substitutability and consequently towards competitiveness.

A6.9 However, Ofcom received strong representations during the September consultation that the mast and site access obligation might not be sufficient to guard against anticompetitive behaviour given ntl and Crown Castle's entrenched positions as suppliers. Therefore Ofcom is in this document proposing a further obligation upon ntl and Crown Castle.

Requiring access to transmission sites on cost-orientated; fair, reasonable, non-discriminatory and transparent terms for the purpose of national, regional and metropolitan broadcasting; and requiring ntl and Crown Castle to provide national broadcasting managed transmission services on cost-orientated; fair, reasonable and non-discriminatory terms.

A6.10 As noted above, Ofcom's aspiration is that more competition develops in the downstream market, and to further this, Ofcom proposes to impose an access requirement at the upstream level. However Ofcom is of the view that in the short term there is a risk that no new entrants may emerge in the market for managed transmission services further to the imposition of the access obligation at the upper layer of the market. In the absence of competition, there would be no assurance that access could be secured on reasonable terms. Therefore, upon further analysis, Ofcom proposes that ntl and Crown Castle are jointly dominant in the provision of managed transmission services. To mitigate that SMP, Ofcom proposes therefore that ntl and Crown Castle be obliged also to provide managed transmission services for national broadcasting on fair, reasonable, non-discriminatory and cost-orientated terms. This should guard against excessive pricing or unfair terms being charged for transmission services.

Accounting separation

A6.11 The transmission companies were required as part of their licence conditions to maintain separate accounts for analogue terrestrial transmission, although this was not retained in the continuation notices. Ofcom is minded to not impose such a condition in the future regulation. This arises from the fact that this document proposes that terrestrial transmission for the future will be subject to regulation as fair, reasonable and non-discriminatory; and cost-orientated. Given that digital terrestrial transmission has hitherto not been subject to any regulation, to impose a new requirement for fully separated accounts on that part of the providers' businesses would be neither proportionate nor compatible with light touch regulation.

- A6.12 Accounts pertaining to the services listed in the proposed regulations may be requested, for example, in the event of a dispute via the information gathering powers in Article 5 of the Framework Directive. Ofcom may also gather such information via its investigation powers under competition legislation. Ofcom's proposals for the use of these information gathering powers are detailed in "Ofcom's statement of policy on information gathering under section 145 of the Communications Act 2003"³⁶.

The risks, benefits and costs of each option

- A6.13 Section 5 of this document outlines how the proposed regulatory remedies fit with the four tests outlined in section 47 of the Communications Act 2003 ("the Act"). Ofcom has also taken views from stakeholders on the implications, costs and benefits of the proposed regulatory remedies. Stakeholders concurred with Ofcom's view that the imposition of a network access requirement at the level of access to masts and sites did not represent a major regulatory burden: both providers operate a site-sharing agreement for access and also permit commercial operators to use their networks, using a similar approach to the operation of the site sharing agreement. Thus the imposition of the network access obligation and the reference offer requirement are a good fit with the reality of the commercial operation of using and maximising the commercial potential of the mast and site network. Concerns were expressed about the burden that any requirement to provide a reference offer for managed transmission services would represent: it would be difficult to devise given the bespoke needs of those seeking access and especially at the time of digital switchover when the needs of those seeking access had yet to be determined. Ofcom was of the view that to require a reference offer to be provided for managed transmission services would be excessively burdensome and would not in fact have many practical benefits in a market where bespoke and novel solutions are likely to emerge over the next while.

The risks attached to each option

- A6.14 The primary risk associated with imposing a network access obligation at the level of access to masts and sites was that competition would not actually emerge at the downstream level of managed transmission services. To forestall this, Ofcom therefore defined and examined the downstream market for MTS and has proposed remedies at that level also. Ofcom also considered the risk of not applying a price control at the downstream level of MTS. However, Ofcom felt that the practical benefits of such a move would not justify this heavy level of regulation. Ofcom noted that a context of potential regulatory intervention had led to commercial negotiations having been concluded in the past for digital transmission. In addition the continuance of a price control in the absence of any access obligation at the upper level of the market would merely ossify the present competitive conditions and not incentivise market entry which is the optimal competitive mitigation of SMP. Although Ofcom could propose access regulation at the upper layer of the market and a price control downstream, any downstream market entrant would have little incentive to enter as the prices were controlled in the market and thus the incumbents would be required to offer a competitive price anyway. It would also not permit access by radio broadcasters.

³⁶ http://www.ofcom.org.uk/static/archive/oftel/publications/about_ofcom/2003/info0703.pdf

Rationale for the preferred option

- A6.15 As outlined in section 5, Ofcom considered the imposition of a range of remedies, including the possibility of no *ex ante* regulation. In proposing the preferred solution, the views of stakeholders taken during both the initial consultation and the informal consultation that preceded this document have been taken into account.
- A6.16 Ofcom has proceeded as outlined for a number of reasons. SMP was identified at the level of access to masts and sites – which are a crucial input for broadcasting. Clearly to introduce the possibility of market entry at that level would be a positive step towards promoting competition and in line with the light touch regulatory aspirations of Ofcom. The ideal outcome for an uncompetitive market is to introduce competition (or the threat of competition) such as to guard against excessive pricing or other exploitation of SMP. However, Ofcom had concerns about whether this resolution would offer a realistic mitigation of the market problems at the downstream level of the market – in particular at a time of major investment in digital transmission. Thus, Ofcom has opted to propose regulation at the downstream level – in a lighter touch way than hitherto – to guard against the risk of excessive pricing as such excessive pricing would be to the detriment of citizen-consumers as end users of broadcasting.
- A6.17 Ofcom is of the view that the proposals in this document will represent a reduction of regulation in certain aspects of the broadcasting transmission market. The prior position with regard to terrestrial transmission was a substantial degree of regulation of analogue television transmission in particular, including a price control and accounting separation. Although digital television transmission was not regulated, all parties behaved as if regulation were present or there was strong likelihood of regulation, owing to the likelihood of Oftel intervening strongly in the event of anticompetitive behaviour. The present proposals with regard to television transmission have removed the price control and accounting separation and imposed a lighter *ex ante* regime whereby the regulation will only intervene in the event of a substantiated complaint. Ofcom is also proposing a regulatory regime that will seek to encourage market entry at the managed transmission layer of the market and in the event that such market entry occurred, Ofcom would be able to lighten or remove that regulation in order to take into account the stronger competition at that level.
- A6.18 With regard to radio transmission, Oftel had imposed a general obligation upon ntl and Crown Castle to offer managed transmission services, but with no restrictions with regard to price. Ofcom proposes to remove the requirement to provide services to all licensees, and to require ntl and Crown Castle to provide MTS only at the national level. Ofcom also proposes to encourage competition and self-provision at the access level of the market for national, regional and metropolitan radio broadcasters. Finally, Ofcom proposes to lift all obligations on ntl and Crown Castle with regard to local radio broadcasters, to reflect their greater range of options for transmission.

The costs associated with the preferred option

- A6.19 The markets under consideration in this review have been subject to heavy regulation since their privatisation and split from vertical integration in the mid

1990s. Ntl and Crown Castle were required to offer transmission services to radio broadcasters (but not on regulated terms) and to offer analogue managed transmission services on a price controlled basis with a requirement for separated accounts. They were also required to share sites with each other (though not with others) with the regulator able to intervene should negotiations be unsuccessful at any point. Digital broadcasting, as a new development, was not regulated but all digital negotiations took place against a backdrop of heavily regulated analogue services.

A6.20 In considering the options outlined above, Ofcom is of the view that the regulation proposed is the lightest touch compatible with the level of market power resting with the incumbent providers. Ntl and Crown Castle have a strong position as the legacy providers with a history of vertical integration with their customers and thus, as outlined in section 4, a position of significant market power at the upper (access) and downstream (managed transmission) levels of the market. As noted above, Ofcom's preferred outcome is for the emergence of competition and it is hoped that the access regulation will lead to that outcome over time. However, at present there are risks associated with solely opting for such an approach, hence the obligations proposed at the downstream managed transmission level of the market. Taken as a whole, these obligations are considerably lighter in touch than previously in place under the Telecommunications Act 1984 licensing regime: the price control and accounting separation requirements have been removed and the access obligation should not be unduly burdensome as it may sensibly be developed from the prior requirement upon ntl and Crown Castle to share sites, and to have a site sharing agreement in place to govern that sharing.

Annex 7

Range of sites used for national, regional and metropolitan FM broadcasting, June 2004

A7.1 The following list indicates some of the most commercially significant sites and their operators for national, regional and metropolitan FM radio broadcasting. This list is not exhaustive and is subject to change owing to changes in transmission practices over time.

| Site | Operator | Site | Operator |
|-------------------|--------------|------------------|--------------|
| Acklam Wold | Crown Castle | Kilvey Hill | Crown Castle |
| Allerton Park | Crown Castle | Limavady | Crown Castle |
| Alsagers Bank | Crown Castle | Londonderry | Other |
| Angus | ntl | Meldrum | Crown Castle |
| Arfon | ntl | Mendip | Crown Castle |
| Bakers Wood | ntl | Mendlesham | ntl |
| Belmont | ntl | Morecambe Bay | Crown Castle |
| Billesdon | Other | Morley | ntl |
| Bilsdale | Crown Castle | Mounteagle | ntl |
| Black Hill | ntl | Nine Barrow | ntl |
| | | Down | |
| Black Mountain | ntl | North Hessary | Crown Castle |
| | | Tor | |
| Blaen Plwyf | Crown Castle | Northampton | Crown Castle |
| Bluebell Hill | Crown Castle | Oxford | Crown Castle |
| Bow Brickhill | Crown Castle | Oxford | Crown Castle |
| Brougher Mountain | Crown Castle | Peterborough | Crown Castle |
| Burnhope | ntl | Plympton | ntl |
| Camlough | Other | Pontop Pike | Crown Castle |
| Carmel | Crown Castle | Presely | ntl |
| Chillerton Down | ntl | Redruth | Crown Castle |
| Churchdown Hill | Crown Castle | Reigate | Crown Castle |
| Clifton | ntl | Ridge Hill | ntl |
| Copt Oak | Other | Rowridge | Crown Castle |
| Craigkelly | Ntl | Saddleworth | ntl |
| Croydon | Ntl | Sandale | Crown Castle |
| Crystal Palace | Crown Castle | Sandy Heath | ntl |
| Darvel | Ntl | Selkirk | ntl |
| Divis | Crown Castle | Shilton | ntl |
| Douglas | Crown Castle | St Hilary | ntl |
| Dover | Ntl | Stoke Holy Cross | BT |
| Dundry | Ntl | Sutton Coldfield | Crown Castle |
| Durris | ntl | Tacolneston | Crown Castle |
| Emley Moor | ntl | Turners Hill 2 | ntl |
| Foxhall Heath | ntl | Vicars Lot | ntl |
| Great Ormes Head | British Gas | Waltham | Crown Castle |
| Guildford | Crown Castle | Wenallt | Other |

Hannington
Heathfield
High Hunsley
Holme Moss

Crown Castle
Crown Castle
Crown Castle
Crown Castle

Wenvoe
Winter Hill
Wrotham

Crown Castle
ntl
Crown Castle

Annex 8

Specific issues raised by consultation respondents and stakeholders

A8.1 Some specific questions have been raised by stakeholders about how the proposed SMP Conditions will work in practice. Ofcom thought that it would therefore be helpful in this consultation to set out on a preliminary basis an indication of how the SMP Conditions might apply in relation to the questions that have been raised. This is, of course, without prejudice to any formal guidance Ofcom may give on the issue either generally in its final statement or specifically in relation to relevant cases.

A8.2 Would it be reasonable to deny access to masts and sites to a provider of MTS which wishes to provide services at a limited number of sites only, rather than across the whole network?

A8.2.1 Such a restriction, which could have an exclusionary effect, would need very strong justification which is not currently apparent to Ofcom. National broadcasters need to secure transmission from the entire network of relevant sites. If they choose to segment their transmission contracts on a geographical basis and use different service providers at different sites, that seems to Ofcom to be a matter for them.

A8.3 If access is given to some masts and sites, can it be refused at others?

A8.3.1 In principle, this is possible if the request for access were not reasonable. However, the provider should be careful to ensure that its refusal was not being unduly discriminatory by providing a service at one site but refusing it at another, where the circumstances were similar.

A8.4 It is reasonable to impose preconditions on the provision of access to masts and sites?

A8.4.1 Ofcom considers that it may be reasonable to do so, wherever this is necessary to make a request for access reasonable. A specific example of this type raised during the consultation exercise concerned the right of a site operator to require existence of adequate insurance covering the installation of equipment which might be necessary to make an access request reasonable and capable of being fulfilled.

A8.5 Could it be reasonable to refuse access to the combiner?

A8.5.1 The Access Guidelines identify the prospect of non-recoverable costs as a legitimate reason for considering refusal to supply a requested service. Provision for an additional channel or multiplex to make use of an existing combiner would usually require considerable reengineering which might easily prove uneconomic. However, there may be cases where use of the combiner is important in order to access the mast, and therefore to refuse access might not be reasonable, where technically feasible.

A8.6 *Could an access request be refused if it meant that existing contracts could not be honoured?*

A8.6.1 Ofcom considers that unavoidable capacity or other resource constraints may be a legitimate reason for refusal to supply on the basis that the request is not technically feasible. Ofcom would nevertheless expect a site operator faced with such a situation to be prepared to take all reasonable steps to ensure that reasonable requests for network access are met.

A8.7 *Does no undue discrimination mean “first come, first served”?*

A8.7.1 Ofcom considers that no undue discrimination does not require an undifferentiated service, but it does consider that any differentiation must be capable of objective justification and that a degree of consistency is employed. There may be access-seekers who may, for objectively justifiable reasons, be treated differently to others. If such treatment appears to make best use of the network resource, that may be objectively justifiable.

A8.8 *What is meant by an “unreasonable” request?*

A8.8.2 In addition, an access request must be reasonable and if unreasonable, may be declined. An access request could be unreasonable in a number of situations. These might include situations where it would cause a contravention of other legal requirements such as health and safety or national security, or where there was not sufficient space on a structure to allow entry.

A8.9 *What if there are restrictive clauses in leases?*

A8.9.1 In some cases the landlord of a transmission site may have a restrictive clause in its lease with ntl or Crown Castle which states that only Crown Castle and ntl may have access to the relevant site. Ofcom is aware of this but is also aware that leases usually have the flexibility to allow compliance with regulatory requirements.

A8.10 *Is it necessary to develop a site-by-site reference offer?*

A8.10.1 In general Ofcom is of the view that the reference offer is likely to be most useful when a company is planning market entry at a national level. However the network access obligation extends to regional and metropolitan broadcasting transmission as well. Ofcom understands that to prepare a full reference offer for all conceivable combinations of broadcast sites would be very onerous and possibly disproportionate. Therefore Ofcom expects that the site operators will provide reference offers corresponding to known patterns of demand. They need not however produce reference offers corresponding to patterns of demand which are speculative.

A8.11 *Is it necessary to offer a uniform national price?*

A8.11.1 For the purposes of access to masts and sites, it may be more appropriate to develop a uniform ‘moderated’ price for UK-wide coverage, thus allowing the site operating company to cross-subsidise where appropriate from high-value sites to lower-value but expensive to operate sites (e.g. in more remote areas). However, different conditions are likely to apply where a single or limited number of sites are being used for

broadcasting over a more limited geographical area.

A8.12 *Can network access prices include a contribution to network overheads?*

A8.12.1 Ofcom believes that developing prices based on a contribution to network overheads is compatible with the requirement for access to be provided on fair and reasonable terms, conditions and charges. Additionally, Ofcom considers that access should permit a provider to make a reasonable return on investment, and to plan for future necessary investment in maintaining the network. As noted by the ERG, it is important that firms have the incentives and the resources to maintain and upgrade their infrastructures. An access requirement would additionally not preclude a provider from offering volume discounts (provided that this does not disproportionately benefit the SMP site operator) and from taking into account issues such as credit ratings when making an offer.

A8.13 *On what basis should prices be reflective of costs?*

A8.13.1 Respondents noted that the pricing of access should be reflective of costs: one suggesting that such cost should be on a fully allocated basis, one on long-run incremental costs and that pricing should take into account the lifetime value of assets. Ofcom considers that the historical costs included in Oftel's determination of the price control mechanism in 1996³⁷ may indicate an appropriate basis for cost-orientation but would ultimately judge any dispute on its merits. Where investments have been made after 2002 (the end of the period of Oftel's analysis) with respect to masts and associated equipment, the relevant costs of such investment including a reasonable return on capital employed and depreciation should be included.

³⁷ http://www.ofcom.org.uk/static/archive/oftel/publications/1995_98/pricing/ntfinal.htm and http://www.ofcom.org.uk/static/archive/oftel/publications/1995_98/broadcasting/terrest/intro.htm