

4 The relevant markets

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Introduction

4.1. This chapter examines the relevant markets in this inquiry and the expected effects of the merger in those markets. We start by reviewing the various systems of TV broadcasting or transmission used in the UK, focusing in particular on the three main pay-TV platforms (DTH/satellite, cable networks and DTT). Following that, we consider the main TV and telecommunication markets of relevance in evaluating the merger, the main parties (NTL and CWC) and other operators involved, and market shares in pay-TV services in the UK. We then look at retail and wholesale pricing; barriers to entry surrounding the relevant markets; and the issues of TV and telephony bundling, and of open access to the cable network.

4.2. The main parties, their financial performance and the reasons for the merger are considered in Chapter 3. The views of third parties and the main parties are considered in Chapters 5 and 6 respectively. A glossary of terms is included at the end of the report.

TV transmission systems

4.3. In this section, we briefly review the main TV delivery systems and services available in the UK, including the three existing pay-TV delivery platforms: DTH/satellite, cable networks and DTT. These were also considered in the recent report by the Commission on the proposed merger between BSkyB and Manchester United (see Appendix 4.1, item 1).

Analogue and digital systems

4.4. Analogue terrestrial TV makes use of land-based transmitters to broadcast signals to viewers within reasonably close proximity of a transmitter. This is the traditional way in which terrestrial channels such as the BBC, ITV etc have been broadcast and received in the UK (and elsewhere). An aerial and a standard TV are the only equipment required to view the channels, although payment of a licence fee (currently £101 for a colour TV) is also required.

4.5. The Government has announced its intention that analogue terrestrial TV transmissions should cease in the period 2006 to 2010 (subject to certain criteria being met), and that they should be replaced entirely by digital TV. Digital technology uses the radio spectrum allocated to TV broadcasting far more efficiently (thereby allowing a much greater number of channels, ie several dozen—and perhaps as many as 50 to 100, according to ONdigital—rather than the current five). The Government has indicated that the switchover will not occur until 95 per cent of homes are deemed able to receive digital transmissions (at present less than 15 per cent are equipped to do so).

4.6. Both the UK cable TV systems (see paragraphs 4.10 to 4.17) and satellite TV transmissions (known as direct-to-home, or DTH) also use analogue transmission at present, though all the major platform operators are in the process of converting to a fully digital service. In both cases, this affords a considerable increase in channel capacity and functionality (for example, the provision of interactive and near-video-on-demand (NVOD) services). Of the cable operators, CWC launched its digital service in July 1999, and Telewest in October 1999. NTL has not yet launched its digital service. Cable operators expect their digital systems to have full (or virtually full) service area coverage by the end of next year (2001). Operating in parallel with up to 50 analogue channels, each of these digital systems will offer around 150 channels: when the analogue transmissions cease, digital cable systems in the UK will be capable of delivering more than 500 channels. BSkyB introduced its digital system, which operates in parallel with its existing analogue service, towards the end of 1998: the current digital capacity is of the order of 200 channels, more than twice that of analogue. This could be increased by means of additional transponder capacity or new satellites.

4.7. DTT services are fully digital, and the main current DTT platform in the UK (operated by ONdigital: see paragraph 4.22) accommodates about 35 digital TV channels. Once the terrestrial analogue transmissions cease (see above), it is possible, the ITC told us, that additional DTT platforms could be licensed, thereby greatly expanding the number of digital channels available on DTT. Such developments are subject to Government plans for the sale of released spectrum, for which no detailed proposals have yet been formulated.

Free-to-air (terrestrial transmission)

4.8. UK free-to-air broadcast services/providers include the two BBC channels (BBC1 and BBC2) funded by a mandatory licence fee; Channel 3 (ITV), comprising several regional franchises, each of which is advertising-funded; and Channels 4 and 5, which are also advertising-funded. Each of these channels offers a broad mix of general entertainment programmes, news/documentaries, sports coverage and feature films (as specified in the BBC's Charter and the commercial broadcasting licences issued by the ITC; on regulation see Appendix 4.2). Taken together they account for around 85 per cent of all TV viewing in the UK (though this proportion has declined in recent years with the advent of pay-TV; see below). For each channel, programmes are either self-provided or supplied by third party, independent programme makers. Appendix 4.3 gives audience share figures for both free-to-air and pay-TV channels. During the course of our inquiry, a number of possible mergers were proposed between the main holders of Channel 3 licences (Carlton Communications Plc (Carlton), Granada Group PLC (Granada) and United News & Media plc).

4.9. The BBC also operates several digital channels (for example, BBC Choice, BBC News 24, BBC Knowledge) which are available without charge on the DTH/satellite and DTT platforms, although in some cases an additional charge is made by cable operators. Similarly, Channels 3 (ITV) and 4 also operate digital channels, whilst ONdigital, the major DTT operator in the UK currently providing pay-TV, is owned and controlled by Carlton and Granada, which each also hold a number of regional Channel 3 licences (see Appendix 4.3).

Cable systems

4.10. In the UK, cable TV systems originally developed on the basis of exclusive franchises covering relatively small areas. Since the early 1990s, cable operators have been permitted to supply telecommunication services as well as TV broadcast services (in the 1980s cable operators could supply telecommunication services as agents for BT or Mercury). Over the past five years, there has been a considerable consolidation (in the form of mergers and acquisitions) among operators, with the effect that there are now only three main operators, each of approximately equal size (Telewest, NTL and CWC). During the course of our inquiry, Telewest announced a merger between itself and Flextech Television Limited (Flextech), a major TV channel provider.

4.11. Cable systems or networks offer broadband transmission direct to individual homes, using a combination of fibre-optic and coaxial cable. Conventional twisted pair copper wire, used for telecommunication services, is usually installed alongside the fibre/coaxial cable. Together, the copper wire and fibre/coaxial are known as a 'Siamese Cable'. This is generally seen as an important technical advantage of cable over other pay-TV and telephony operators, in that cable operators can achieve significant economies by providing telephone and pay-TV services together. As a result, these two services are generally offered as a single package by cable operators (see paragraphs 4.101 to 4.109 on bundling). In order to view TV programmes, cable users/subscribers require a cable connection to the home, a set-top box receiver/decoder and a standard TV. As mentioned earlier, UK cable operators are in the process of introducing digital systems. When operated in parallel with up to 50 analogue channels, as at present they are, each of these digital networks can offer around 150 TV channels: when the analogue transmissions cease, digital cable systems in the UK will be capable of delivering more than 500 channels. In practice, much of this extra capacity will be used to provide PPV and interactive services.

4.12. As with DTH/satellite and DTT, cable systems offer multi-channel pay-TV services. The range of services available includes general entertainment channels (for example, Sky One), themed and special interest channels (for example, History Channel, children's channels etc), sports (for example, Sky Sports and Eurosport), and film (for example, Sky MovieMax and FilmFour). Channels can be divided into premium (for example, Sky Sports 1 and 2) and non-premium. Subscribers receive access to a basic package of non-premium channels, and can then choose additional non-premium channels, usually packaged together in thematic groups (for example, all children's channels in a group). Premium channels may be subscribed to singly (in addition to the non-premium package chosen), in groups and/or with non-premium channels (see Table 4.8). The main premium channels are Sky Sports 1 and 2, Sky Premier, Sky MovieMax and FilmFour (dedicated film channels) and the Disney Channel. Many of the channels available on cable are the same as on the DTH/satellite and DTT platforms, and many of these, including four of the six main premium channels, are provided by BSkyB on the wholesale level. Cable operators also provide PPV services: CWC carries Sky Box Office while NTL and Telewest operate Front Row, a PPV film and special event service, as a joint venture.

4.13. CWC is currently introducing its interactive service, which gives viewers access to a selection of Internet sites via their TVs and to services such as home banking, shopping, and e-mail. NTL and Telewest are also developing interactive services. Digital transmission is far better suited to the provision of interactive TV than analogue transmission, because of the large amount of capacity used by an interactive service.

4.14. Cable may be described as a closed system, in the sense that a cable operator has complete control over which channels are broadcast over its network. In contrast, in the case of DTH/satellite it is possible for channel providers themselves to broadcast directly to satellite subscribers without the active cooperation of BSkyB. For a further discussion on the subject of open and closed access see paragraphs 4.110 to 4.123.

4.15. About 50 per cent of UK homes are passed by cable systems (mainly in urban areas) and are therefore able to get a cable connection. Currently there are about 3.1 million subscribers to cable TV services, a penetration rate of about 25 per cent within cable areas, and 13 per cent of all UK homes. While cable networks were originally built under exclusive franchise in their respective areas, we were told by cable providers that such exclusivity is not necessary where a network has been built, because the costs of overbuilding into another cable company's network area are prohibitively expensive, and not justified by the potential returns. The ITC has ruled that all exclusive franchises will become non-exclusive as of 2001. Meanwhile cable companies have already given up their right to in-franchise exclusivity in many areas. By so doing they are released from the obligation to further roll out their networks, and make tender payments to the Government.

4.16. The high cost of building a cable network means that it is only economic in urban areas, and cable network coverage, having reached around 50 per cent of the population, appears to be slowing (see Table 4.4). However, cable companies may be able to extend their coverage using DSL technology, which enables high-speed digital signals to be sent down traditional telephone lines (see paragraphs 4.23 and 4.24). BT is introducing DSL to its exchanges on an extensive scale this year (2000). BT told us that other operators would be able to obtain wholesale versions of retail DSL services provided by BT, and that BT is currently in discussions with OFTEL regarding the provision of a local loop product with which other operators could use their own DSL equipment from July 2001. It is not yet clear that DSL will have the capacity to support a full pay-TV service (but see paragraph 4.24).

4.17. As cable companies do not generally own the channels they deliver, and have a very limited ability to insert advertising on these channels, their revenue from advertising is marginal. Instead they are dependent upon subscription revenues, a significant proportion of which must be paid to channel providers, such as BSkyB (see paragraph 4.89), and revenues from their telecommunications and other operations.

DTH (direct-to-home satellite transmission)

4.18. The major DTH/satellite service in the UK is operated by BSkyB, and is primarily a subscription-based, multi-channel pay-TV service, although other services are available on the platform independently of BSkyB's retail service. Reception requires a dish aerial aligned to the transmitting satellite and a set-top box, as well as a standard TV. BSkyB's analogue DTH/satellite service has been available in the UK for over ten years, but the digital service was introduced only at the end of 1998. BSkyB told us that it was actively encouraging analogue subscribers to switch over to the digital service; [

Details omitted. See note on page iv.]

4.19. The digital DTH/satellite platform currently accommodates in the order of 200 separate TV and audio channels. This includes, like the cable and DTT platforms, general entertainment channels, themed and special interest channels, sports channels and dedicated film channels, both subscription-based (for example, Sky MovieMax and FilmFour) and PPV (for example, Sky Box Office and u>direct). Some of the channels available (including the four main premium channels) are supplied by BSkyB itself, though many of the channels retailed by BSkyB are supplied by others (for example, Disney Channel, FilmFour). In addition, some channels available via DTH/satellite are supplied by companies other than BSkyB and retailed separately (examples of such pay-TV channels are u>direct, Zee TV, The Racing Channel and several adult channels: see also paragraph 4.122).

4.20. Most DTH/satellite channels are funded largely by subscription revenues (there are about 3.6 million BSkyB/DTH subscribers at present), though advertising revenues are also important, whilst others are either (a) free-to-air and advertising funded (for example, CNN); or (b) PPV channels (for example, u>direct). Many (though not all) of the TV channels available on DTH/satellite are also available on both the UK cable networks (which currently have about 3 million subscribers in total) and the DTT platform (0.5 million subscribers).

4.21. Since the end of 1999 an interactive service called Open, operated by a joint venture company (Open Interactive Limited, a subsidiary of BiB Holdings Limited) in which BSkyB and BT each have a one-third equity share, has been broadcast on a free-to-air basis over the DTH/satellite platform. In terms of content, Open is broadly similar to the interactive service offered by CWC, in the sense that both provide transactional services, e-mail and information facilities. (see paragraph 4.13).

DTT (digital terrestrial transmission)

4.22. Multi-channel pay-TV services via the DTT platform were first introduced in the UK towards the end of 1998. The major operator currently providing pay-TV is ONdigital, which is jointly owned by two of the Channel 3 companies (Carlton and Granada). Reception requires a normal TV aerial, a set-top box receiver/decoder/smart card and a standard TV. The number of channels available is less than that generally available from other pay-TV services, although the main Sky premium channels are included. At the end of 1999, there were around 0.5 million ONdigital subscribers, although ONdigital forecasts that this will double by the end of 2000.

Other TV delivery systems

4.23. The delivery of TV material to homes may also be possible using DSL technology. This uses a modem both at the local telephone exchange and at individual homes to transform the standard telephone line (twisted copper wire) into a high-speed digital pathway, which is capable of delivering broadband services such as a video-on-demand (VOD) TV channel or high-speed Internet access. BT is introducing DSL to its exchanges on an extensive scale this year, and operators other than BT will be free to install their own equipment, on the upgraded BT network, as from July 2001.

4.24. The future impact of DSL-based systems appears uncertain at this stage, and BT has told us that its technical capabilities will prevent it from competing fully with current pay-TV platforms. However, we note that a limited area VOD service using DSL has been introduced recently in London by Video Networks Ltd. Kingston Communications is currently introducing a TV/VOD system in the Hull area, and is planning a joint venture with BSkyB to provide a 60-channel pay-TV service using DSL. Elmsdale Media has applied for a TV licence to permit it to offer TV services over BT's DSL network. NTL told us that it is also conducting its own technical trials of DSL. CWC believes that use of DSL is not possible for a cable company with a pay-TV package of its (CWC's) size, and not a realistic option given its heavy investment in cable technology.

4.25. Microwave video distribution service (MVDS) may also offer the prospect in the future of delivering TV material direct to homes, though it may also be used as an adjunct to cable networks. No substantial MVDS systems are currently in place in the UK.

TV markets

4.26. In order to evaluate the effects of the merger, we need to consider which markets are of relevance (for example, whether pay-TV or free-to-air are in the same or separate markets), what products they include and their geographic scope (local, national or international).

4.27. TV broadcasting markets were considered in some detail in the recent Commission report on the proposed BSkyB/Manchester United merger; and also by the European Commission (DGIV) in a number of recent cases involving pay-TV broadcasting (see Appendix 4.1). The BSkyB/Manchester United report compared the different characteristics of pay-TV compared with free-to-air TV in general, and looked in particular at the way each was financed, the pricing of pay-TV, competition in bidding for sports rights, and substitutability between the two.

4.28. The Commission noted that there are many more channels on pay-TV than free-to-air, including some devoted to specialist programmes, exclusive live coverage of many sporting events and showing of films considerably earlier than they are permitted to be shown on free-to-air TV. The Commission also noted that pay-TV was financed by subscription, which was additional to the TV licence fee (a feature of the market also referred to in the EC decision on Bertelsmann/Kirch/Premiere; see Appendix 4.1). Platform providers (cable, satellite and DTT) all had similar price structures, the price being related to the number of channels received, and to the wholesale prices paid to channel providers such as BSkyB. The Commission also noted that pay-TV prices had increased relative to the RPI from 1993 to 1998, but there had also been an increase in the market share of pay-TV in that period.

4.29. The Commission acknowledged that there were some sports rights for which free-to-air and pay-TV broadcasters competed (see Appendix 4.4), but that this did not mean sports programmes on

free-to-air TV were ready substitutes for those on pay-TV. Premium pay-TV sports channels were based on the rights to sporting events for which free-to-air channels could not compete. The Commission noted that in the 1996 sale of Premier League live rights, all three bidders were planning to broadcast the matches on pay-TV, and no free-to-air channel was a contender. The Premier League was also reported as having the view that only pay-TV broadcasters were able to compete, and the BBC and ITV Network confirmed that they did not expect to submit bids for Premier League live rights if the current selling arrangements continued.

4.30. The Commission also considered demand-side and supply-side substitution. The normal concept of substitutability was not applicable, since before consumers subscribed to pay-TV they must first purchase TV sets and licences, which automatically gave them access to free-to-air channels. The Commission would expect consumers to choose whether or not to subscribe to pay-TV in terms of a broad assessment of its benefits. If they decided that they wanted it, then it was likely to be because they wanted a service that was different from and additional to free-to-air TV, rather than seeing pay-TV as a substitute. It therefore seemed improbable to the Commission that a monopoly supplier of all pay-TV channels (basic and premium) would be prevented from sustaining prices 5 to 10 per cent above competitive levels by the existence of free-to-air TV.

4.31. As a result, the Commission concluded, as had the DGFT, that pay-TV services represented a separate market from free-to-air TV services, while recognizing that the existence of free-to-air services would place some constraint on the prices of pay-TV broadcasters. The Commission went on further to conclude that it was appropriate to distinguish between premium and non-premium channels and between premium sport and film channels, the relevant broadcasting market for its purposes in that inquiry being the market for pay-TV sports premium channels.

4.32. NTL and CWC told us that the pay-TV market is distinct from the free-to-air TV market, although NTL also said that free-to-air acts as a source of competition to the pay-TV market. BSkyB said that, while it contested this definition of the product market, it was the definition which had been used, by the OFT and others, when regulating BSkyB, and that the same definition should be used in assessing other parties such as NTL and CWC. For a discussion of the telecommunication markets relevant to this inquiry, see paragraphs 4.44 to 4.49. Interactive services are discussed in paragraph 4.41.

4.33. As regards the geographic market, BSkyB told us that a cable operator should be assessed in respect of the total geographic area in which it is active (ie the area in which it has built and operates its network). It argued that a cable company, considering whether to increase prices in one of its franchise areas, is not constrained by the presence of another cable operator in an adjacent franchise, as customers cannot switch between cable operators. BT submitted a report to us by Lexecon Ltd (Lexecon) which considers that defining the market as local (to a cable operator's franchise areas) is 'a better way to capture the extent of competitive constraint on the cable companies'. The report looks only at the relevant market for determining the market power of cable companies at the retail level. Lexecon told us that a different geographic market may be relevant in determining the retail market power of BSkyB, or in determining advantages held by different platform owners in negotiations with channel providers.

4.34. The OFT and OFTEL have said that 'in trying to define the geographical boundaries to a product market the aim is to identify the extent to which the proximity of rival suppliers can impose competitive constraints on the undertaking in question'.¹ In addition, the European Commission noted that 'the relevant geographic market comprises the area in which the undertakings concerned are involved in the supply and demand of products or services, in which the conditions of competition are sufficiently homogeneous, and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different in those areas.'² It could be argued that, as each cable operator is involved in the supply of services only within its respective franchise areas, and as the proximity of cable networks in other areas does not impose competitive constraints on it, the relevant market for each cable operator is indeed the geographic area within which it is active.

4.35. However, the OFT and OFTEL noted, in the above-mentioned paper, that 'it is not practical to pre-define the relevant markets for examining competition issues in any sector and any market definition is, particularly in a sector subject to rapid technological and regulatory change such as

¹OFT/OFTTEL, Draft guidelines on the Competition Act 1998, Application in the Telecommunications Sector (OFT 417).

²European Commission, Notice on the definition of relevant market for the purposes of Community competition law (OJ (1997) C372/03).

telecommunication, likely to become obsolete'. The appropriate definition may also vary between countries. The EC Decision on MSG Media Service¹ considered, when studying the German market in 1994, that cable and satellite TV belonged to separate markets. Moreover the EC Access Notice² comments that 'any attempt to define particular product markets in [the Access Notice] would run the risk of rapidly becoming inaccurate... The definition of particular product markets ... is best done in the light of a detailed examination of an individual case.' In the case at hand the cable operators told us that they operate in a national market, albeit that they do not compete directly with one another, because each competes directly with BSKyB and ONdigital for pay-TV subscribers. As a result, each cable operator is competitively constrained by BSKyB's and ONdigital's prices, which are determined at a national level, so the relevant market could effectively be seen as a national one. A national market definition also has the advantage of reflecting the scale of pay-TV operations of each company: for example, BSKyB may enjoy greater power in negotiations with channel providers, due to having a larger subscriber base than any of the individual cable operators, or economies of scale in running national advertising campaigns. Lexecon (see paragraph 4.33) has argued that these advantages should already be reflected in BSKyB's market share on the local level.

4.36. The Lexecon report commissioned by BT considered a hypothetical example in which, for each of ten areas, a national competitor has 20 per cent share, and a different cable company has the remaining 80 per cent share. It said that in any given area customers have only two options and, in each, it is the cable company which has the highest share. Customers must therefore prefer cable pay-TV, and so each cable company faces a very weak constraint on its prices. We note that the finding that customers prefer cable pay-TV is based on the high market share of cable operators used in the example. In reality the only local market shares available are those produced by BSKyB, which have been contested by the cable operators (see paragraphs 4.68 to 4.70).

4.37. The report also suggests that widening the market definition because of a chain of substitution is a crude, and in some cases incorrect, response to the observation that competition in one area can affect market power in another. To support this it provides another example, in which a national competitor with 100 per cent share in one area (A) charges a high price there and, as it prices nationally, also charges a high price in another area (B) where it has 20 per cent market share in competition with a cable operator (80 per cent). It says that cable will face an even weaker competitive constraint than suggested by its 80 per cent local market share (used in the example), but, if the market was defined as national, cable's share would be lower still, and so an even poorer reflection of the weak pricing constraint it faces. However, the analysis does not point out that a national market definition would, in this example, also reflect the overall greater size of the national competitor, due to its 100 per cent share of area (A), which lies behind its pricing decision in area (B). Nor does it point out that the national competitor's small share in the cable operator's network area (A) may prevent it from increasing prices in other areas, where it has 100 per cent share, and that this mechanism suggests competition on a national level. Lexecon told us that it believed a national market definition might be more useful in assessing the market power of BSKyB (which we note is also relevant to this merger) but that this did not preclude the analysis of cable companies' market shares on a local level.

4.38. In its decision on MSG Media Service, the European Commission decided that pay-TV should be defined as a national market, although its discussion dealt with the possibility of an international market, rather than sub-national markets. The European Commission Decision on Bell Cablemedia/Cable & Wireless/Videotron,³ which deals in particular with UK cable TV networks, remarks that

whether the market is defined as local, in which case there is no horizontal competition concern as there is only one franchisee in each given territory; or whether it is defined as national—which means assuming that programme suppliers operating in other franchised areas are supplying programmes to the areas in question—the question can be left open, because on either definition the present operation does not give rise to competition concerns.

4.39. We now look briefly at the structure of the market. The UK pay-TV market comprises a hierarchy of distinct broadcasting markets, albeit that the boundaries between them are not in all cases well

¹European Commission Decision, MSG Media Service, Case No IV/M.469 (OJ (1994) L364/1).

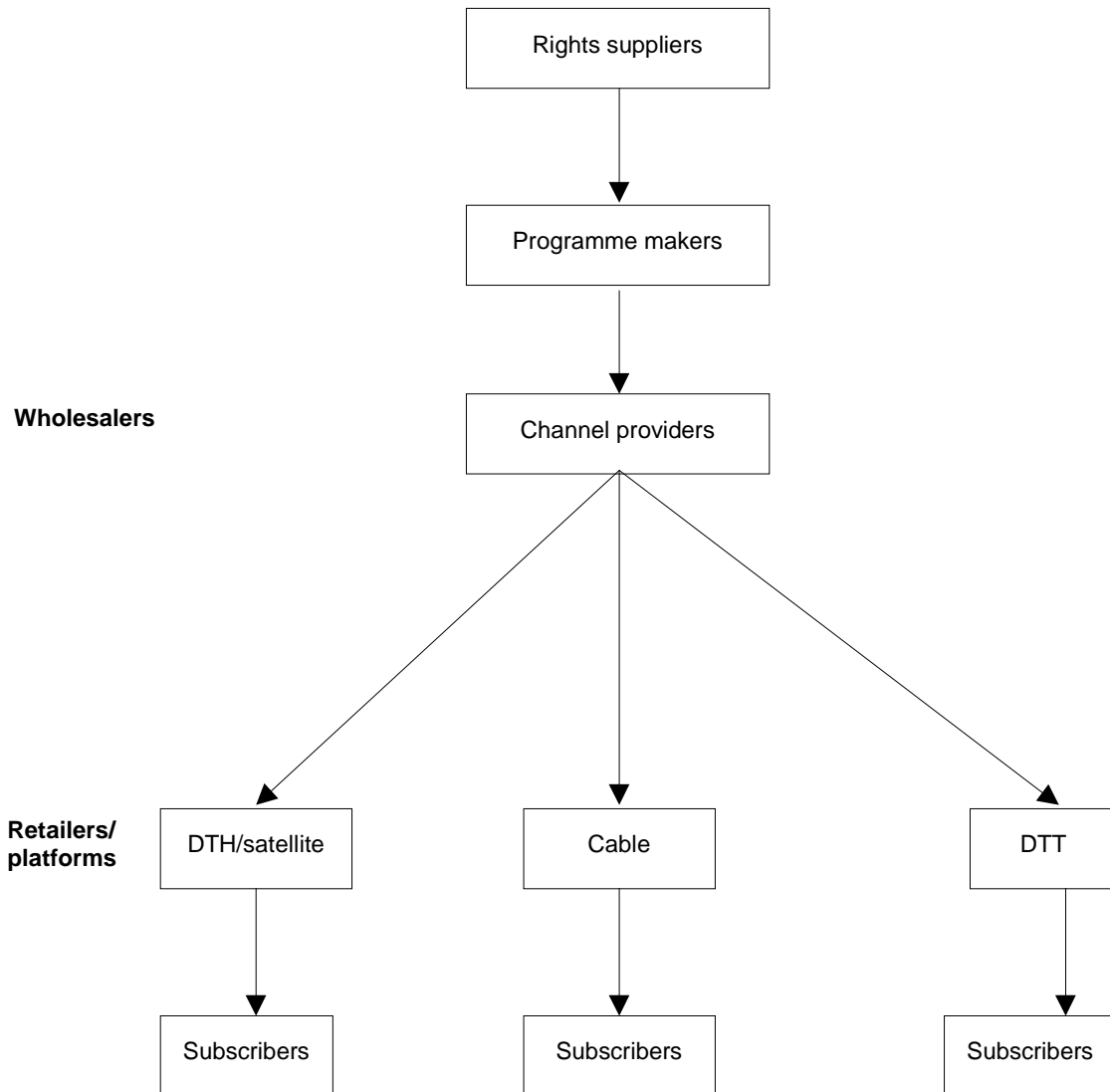
²21. European Commission, Notice on the application of the competition rules to access agreements in the telecommunications sector (OJ (1998) C265/02).

³European Commission Decision, Bell Cable Media/Cable & Wireless/Videotron, Case No IV/M.853 (OJ (1997) C24/22).

defined. Figure 4.1—which is adapted from a figure in the BSkyB/Manchester United report—sets out the vertical structure and elements of the pay-TV supply chain. At the top level are programme makers and owners and suppliers of programme material rights such as sports events (for example, the Premier League) or film rights (for example, Hollywood movie studios). Below that, there is the wholesale level of channel providers, of which BSkyB is the largest. The retailers of pay-TV services are essentially those delivering services via the three delivery platforms: BSkyB (DTH/satellite), cable operators and ONdigital (DTT), although some smaller channel providers also retail over the satellite platform independently of BSkyB (see paragraphs 4.19).

FIGURE 4.1

The pay-TV supply chain



Source: Commission, derived from ITC.

Note:

1. No separate rights supplier exists for most TV programmes, the main exception being that of sports rights. Competition for sports rights may also come from free-to-air broadcasters.
2. Broadcasters can retail their channels on the DTH/satellite platform independently of BSkyB.
3. In the context of DTT, pay-TV means ONdigital.

4.40. Interactive services (including the provision of e-mail, and limited or unlimited Internet access via TV) could potentially be seen as a separate market. The European Commission decision on BiB/Open (see Appendix 4.1) found that the market for a package of interactive services of the kind offered by Open was separate from (a) high street retailing, (b) interactive services available via PC, and (c) pay-TV. The European Commission commented that pay-TV services are largely entertainment services, whereas interactive services such as Open are largely transactional or informational.

4.41. At present, however, all existing interactive TV services are effectively provided as part of a multi-channel pay-TV package.¹ Indeed the European Commission commented that the interactive TV market was complementary to the pay-TV market. All have been developed (or in the case of NTL are being developed) by the operators of the platforms over which they are (again, at present) exclusively delivered (albeit that BSkyB developed Open in joint venture with BT and others). We note that this type of service is in embryonic stage (BSkyB told us that QVC and others are now developing interactive services), and it is not yet clear in which markets it will ultimately compete.

4.42. As regards the markets for channel content, a distinction can be made between non-premium and premium channels. The main premium channels are dedicated to either sports or movies, and show content to which the channel providers have exclusive rights. (The BSkyB/Manchester United report looked at premium sports and premium movie channels as separate markets, with a possible further subdivision between subscription and PPV channels.) For example, BSkyB has rights to the Premier league football matches, and to new movies produced by several of the major Hollywood studios. It is generally believed in the industry that demand for premium channels is a key driver of demand for pay-TV. This subject is discussed in more detail in paragraphs 4.94 and 4.95.

4.43. In the context of this merger, we consider the broadcasting markets of relevance to be:

- (a) the UK market for pay-TV at the retail level, with some local characteristics in the case of cable operators;
- (b) the UK market for pay-TV at the wholesale level;
- (c) the UK market for basic (non-premium) channels; and
- (d) the UK market for premium channels, including rights acquisition.

The telecommunication markets

4.44. Pay-TV and telephony/telecommunications are conventionally seen as separate markets, although they are linked in that both services can be supplied, simultaneously, over a cable network, where a telephone line has been laid alongside the cable, ie a Siamese cable (see paragraph 4.11). We note Lexecon's comments, in their report commissioned by BT, that because of cable operators' ability to sell pay-TV and telephony as a bundle, such bundles could in principle be seen as forming a separate market (see paragraphs 4.101 to 4.109 on bundling). The level of linkage between the two may in future be increased by the use of DSL technology, which at present has the capacity to transmit both telephony and either a single TV channel or high-speed data; and the lifting, in 2001, of the ban on BT's providing a TV service. BSkyB currently offers a discount to BT telephone users, as part of its pay-TV package, and is engaged in a joint venture with BT and others to provide the interactive service, Open. However, at present a significant proportion of consumers make separate decisions about their use of telephone and pay-TV services.

4.45. Within the telecommunication sector there are several different sub-markets. NTL and CWC told us that they did not believe fixed and mobile telecommunications had yet reached a point where the two could be regarded as substitutes and included in the same market, although BT told us that service

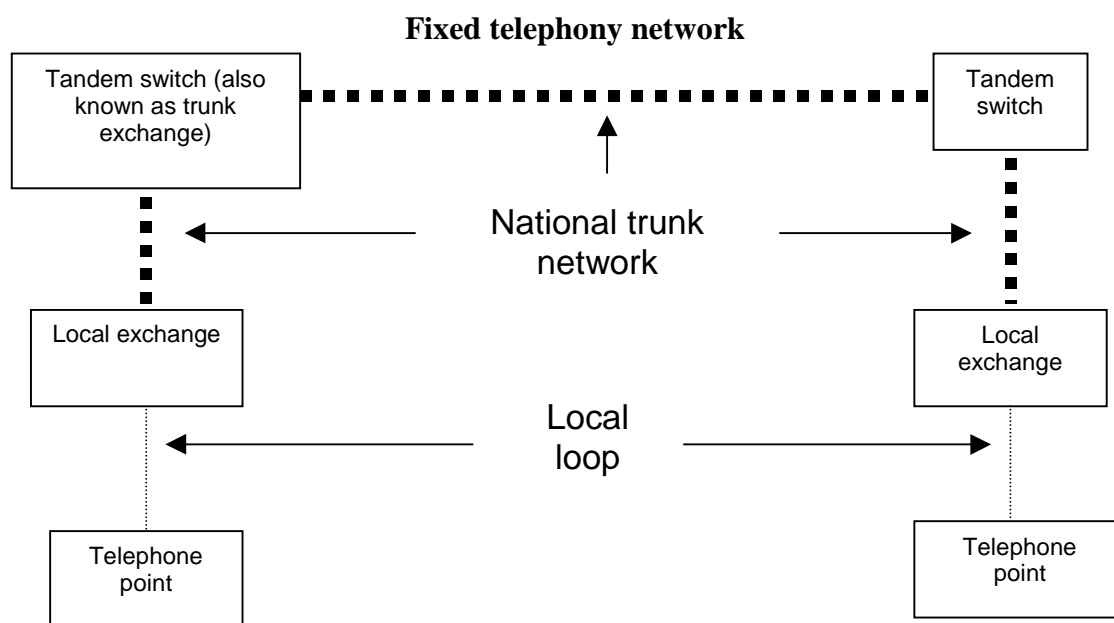
¹Open told us that it has negotiated agreements at 'arm's length' with SSSL (BSkyB's wholly-owned subsidiary) for access to the digital satellite platform. The originally notified agreements for the establishment of Open required that customers must subscribe to BSkyB's pay-TV service. The removal of this requirement, inter alia, addressed the European Commission's concern that the DTH/satellite platform would be closed to other potential providers of interactive services. We note that in practice there are likely to be few, if any, users of the digital satellite platform who do not subscribe to BSkyB's pay-TV service, and that BSkyB continues to be a major shareholder in Open. As noted in paragraph 5.130 et seq, Open has sought carriage on other platforms.

substitution is present and increasing between the two. At present NTL does not operate a mobile telephony service, although BT told us that in 1998 NTL and Orange announced a partnership to offer complete fixed/mobile services to corporate customers. NTL has applied for a licence to operate the next generation of mobile phone services in the UK.

4.46. A further distinction can be made between fixed retail and wholesale telecommunications. The wholesale market comprises the provision of network facilities and services to other operators or service providers, so that they have a delivery mechanism for their retail telecommunication services. Delivery can involve interconnection between networks, indirect access or leased circuits (see paragraph 4.51), among others.

4.47. The basic structure of a fixed telephony network is illustrated in Figure 4.2. Voice or data is transmitted from a telephone point to a local exchange, and from there to a tandem switch. The network of transmission lines that connect local exchanges to tandem switches and tandem switches to one another is called a national trunk network. The connection from local exchange to telephone point is called the local loop, and is needed at each end of the telecommunication link. The majority of local loop connections are made by BT over its copper wires. However, cable operators are able to use their own cable networks, within their franchise areas, to offer an alternative local loop service (ie a direct service to the customer).

FIGURE 4.2



4.48. An operator may have the choice of providing parts of its infrastructure on a retail or on a wholesale basis—ie there is supply-side substitution between the two segments. (Indeed BT is under a regulatory obligation to allow wholesale network access to other operators.) NTL did not distinguish between retail and wholesale markets in its account to us of market definition, although CWC told us that the relevant product market was that of fixed line retail telecommunication services, comprising the provision to end-users of voice and data services over fixed line infrastructure. The wholesale market is relevant to the discussion of interconnection agreements in paragraphs 4.56 and 4.57.

4.49. Retail services can differ as to call destination (local, national or international), and whether they are provided to residential or business customers. NTL told us that there was a high level of supply-side substitution between all of these segments, and that they were all therefore part of the same product market. However, the OFTEL market share statistics discussed in paragraphs 4.53 to 4.55 show a marked difference in the profiles of the business and residential segments. CWC described business and residential customers as forming part of the same retail market, while noting that they may differ in that business customers use more services during working hours, whereas residential customers use more services during the evening and weekends; and that this generally determines their choice of tariff schemes. We note CWC's comment that it will be transferring only a small part of its business customer base to NTL,

and the majority of its telecommunication business will be unaffected by the merger and related agreements, apart from the terms for termination charges for calls to former CWC cable networks.

4.50. Until the liberalization of telecommunications in the UK (between, broadly speaking, 1981 and 1991) BT had the only national trunk network. Mercury (now CWC) was the first licensed alternative telecommunications infrastructure operator in the UK. BT told us that Mercury had exploited the concentration of business customers by creating an alternative, directly-connected network to large business customers in the major UK conurbations, and a long-distance network between these conurbations. As such it competed both with BT's local loop and its national trunk network in the provision of business telecommunications.

4.51. Business and residential customers who were not directly connected to Mercury's network but who wanted access to its long-distance infrastructure could use indirect access. Indirect access means that customers are able to access the long-distance networks of one operator via another's local loop network. This may involve dialling a network access code before making each call. Direct or indirect access to CWC's national network is available to 95 per cent of the population in the UK. Another alternative to an operator installing its own infrastructure is to lease all, or the necessary parts, of the infrastructure of another operator. For example, an operator can lease transmission lines to connect its customers directly to its core network.

4.52. NTL has also built a national network, using fibre optics, and concentrating on densely populated areas, as have Energis, Racal and Scottish Telecom. NTL also provides local access (in competition to BT's local loop) through its cable networks, and, BT told us, has been awarded a fixed radio access network licence which will enable it to provide local competition in areas outside its cable franchises. BT told us that NTL is expected to provide access, using this technology, to 68 per cent of the UK population by 2003. However, NTL told us that the licence covered frequencies intended for high-speed business-to-business services, not the consumer market. It said that the figure of 68 per cent refers to the roll-out obligation contained in the licence, which is expressed as a percentage of the population covered, despite the non-residential character of the service.

Telecommunication market shares

4.53. Table 4.1 shows market shares of residential and business telecommunications by call revenues. Business service revenues were £4.1 billion from March 1998 to March 1999, and residential call revenues were £4.2 billion. In the residential telecommunication market BT has over 70 per cent market share in each segment (local, national and international), and over 80 per cent of residential call revenues overall. CWC accounts for around 6 per cent of local and national call revenues, and over 8 per cent of international calls, while NTL's share is between 3 and 5 per cent in all segments.

4.54. In business telecommunications, BT has a market share of almost 60 per cent overall, with around 80 per cent of local calls, but only 37 per cent of international business calls. CWC has a larger share of business than of residential revenues, and is particularly strong in international services, with a share of around 18 per cent. Other operators account for 42 per cent of international revenue from business customers (and 9 per cent of those from residential customers), suggesting that this is the most fragmented segment of fixed line telephony markets. NTL's share of business telecommunications revenue is around 1 per cent. NTL told us that only a small part of CWC's business telephony operation would be transferred to NTL in the proposed merger. CWC estimated this as around 7 per cent of the revenue generated by CWC business customers.

4.55. Revenues shown in Table 4.1 are gross, and do not account for transfers between telecommunication operators on the wholesale level. Table 4.2 is a summary of the wholesale revenues of BT and the post-merger CWC and NTL. In addition to its large market share in retail, BT also has a significant share in wholesale telecommunications—considerably larger than that of C&W. These figures are based on the interconnection revenues for services to other providers, and so exclude transfer payments for the BT system to BT's retail business. BT told us that the data provided by OFTEL were of limited reliability due to the difficulty of accurate data collection, and that it was not appropriate to consider a total interconnect market share, as each segment should be seen as a separate market. We note that the merger will slightly reduce CWC's share of wholesale business, as part of this business will be transferred to NTL (see paragraph 4.57).

TABLE 4.1 Retail telecommunication market shares by call revenues, March 1998 to March 1999

per cent

	<i>Share of residential call revenues</i>				<i>Share of business call revenues</i>			
	<i>Local</i>	<i>National</i>	<i>Int'l</i>	<i>All*</i>	<i>Local</i>	<i>National</i>	<i>Int'l</i>	<i>All</i>
BT	82.5	84.9	74.1	81.9	78.8	60.6	36.5	58.8
NTL	4.7	3.6	3.2	3.9	1.7	1.2	1.8	1.2
CWC	6.0	6.2	8.6	6.8	8.8	13.4	18.3	17.8
Other cable	6.5	4.0	5.2	5.5	3.2	2.0	1.6	2.5
Others	<u>0.4</u>	<u>1.3</u>	<u>9.0</u>	<u>2.0</u>	<u>7.4</u>	<u>22.9</u>	<u>41.7</u>	<u>19.7</u>
Total £m†	1,439	900	666	4,209	742	1,010	768	4,082

Source: OFTEL market information, quoted by NTL.

*Excludes certain other calls such as calls to mobile phones.

†OFTEL market information update June 1999, quoted by CWC.

Note: Percentages may not sum to 100 because of rounding.

TABLE 4.2 Interconnect revenues and market share, 1999

	<i>From UK</i>						<i>From overseas</i>		<i>Total</i>	
	<i>Fixed inland</i>		<i>Fixed international outgoing</i>		<i>Cellular</i>		<i>Fixed international incoming</i>			
	<i>£m</i>	<i>%</i>	<i>£m</i>	<i>%</i>	<i>£m</i>	<i>%</i>	<i>£m</i>	<i>%</i>	<i>£m</i>	<i>%</i>
BT	511	51.2	62	12.4	165	78.9	374	53.5	1,112	46.2
CWC DataCo*	177	17.7	128	25.5	41	19.6	262	37.5	608	25.2
Enlarged NTL*	<u>53</u>	5.3	<u>2</u>	0.4	<u>-</u>	-	<u>-</u>	-	<u>55</u>	2.3
Total	999		501		209		699		2,408	

Source: CWC, based on OFTEL market information. CWC commented that it believed that BT's network's revenues from BT Retail should be included in assessing the market.

*Estimated by CWC: CWC DataCo is the part of CWC which would not be transferred to NTL by the merger. CWC estimates are based on the assumption that NTL currently accounts for around half of the 'other cable' figure provided by OFTEL.

Interconnection agreements

4.56. A call may be made from one network to a customer of another network. When this occurs an interconnection is made between the two separately-owned networks, and a payment (called a termination charge or interconnection charge) is made by the operator of the network on which the call originates to the operator of the network on which it terminates. BT is under a regulatory obligation to offer interconnection agreements to any other licensed operator, and the terms of these agreements are regulated by OFTEL. Other network operators also have interconnection rights and obligations under the EC Interconnection Directive.

4.57. CWC and NTL have agreed to enter into new interconnection arrangements whereby national traffic and other services from NTL's post-merger telephony business will be routed via C&W's network, provided certain conditions are met. CWC was formed by the combination of Mercury and three cable companies: Mercury operated its national telecommunication network, and each of the cable companies operated cable networks in their separate franchise areas. NTL and CWC told us that, following the present merger, C&W would own the CWC national trunk network and NTL would own the former CWC cable networks. NTL considered it necessary that these cable networks should continue to have access to the CWC national trunk network, to deliver their telecommunication service, for a transitional period of three to five years while NTL extended its own national network to reach the new NTL cable networks. The parties told us that the new interconnection agreements between NTL and CWC

DataCo would ensure that NTL had access to this network over the transitional period, and would provide CWC DataCo with traffic volumes while it established other sources of traffic. As such these arrangements were considered necessary by both parties to the completion of the merger. As part of the same agreement, NTL will also appoint CWC DataCo as supplier for some wholesale telecommunication services. The interconnection agreements are discussed in more detail in paragraphs 3.86 to 3.118.

The operators

4.58. In this section we briefly describe the main companies operating in the UK pay-TV market.

NTL Incorporated

4.59. NTL is the second largest retailer of cable TV in the UK (by number of subscribers), having more than trebled its subscriber base since 1997, largely by means of mergers with other cable companies. Its management and employees own around 20 per cent of the company. Microsoft is among its other shareholders. NTL is incorporated in Delaware and its stock is quoted on NASDAQ and EASDAQ. NTL has significant non-cable business including national and international telephone carrier services, business telecommunications, Internet services and broadcast infrastructure services (satellite uplinking, terrestrial transmission). NTL has a one-third share of S4C Digital Networks (SDN), a DTT multiplex operator, through which it plans to provide a PPV channel for movies and special events (ONrequest) in joint venture with ONdigital. It has recently acquired a holding in one Premier League football club (Newcastle United) and has announced a media partnership with another, Aston Villa, which will result in NTL owning a share of the club. NTL franchise areas include Northern Ireland, Glasgow, Middlesbrough, South Wales and the East Midlands.

Cable & Wireless Communications plc

4.60. CWC, the third largest cable pay-TV retailer in the UK, is a 53 per cent owned subsidiary of C&W. CWC was formed in 1997 by the combination of Mercury, a provider of fixed telephony services, with three cable operators (NYNEX CableComms, Bell Cablemedia and Videotron). In addition to pay-TV and fixed telecommunication services via its cable network, CWC provides telecommunication services and Internet access indirectly via the BT network. It also provides wholesale and international telecommunication services. CWC launched digital pay-TV to a limited geographical area in July 1999 and is currently extending the service to other areas. CWC franchises include Leeds, Manchester, parts of London and the South-East.

Telewest Communications plc

4.61. Telewest is the largest cable pay-TV retailer in the UK. It has no interests outside the UK cable market. Major shareholders are MediaOne International, Liberty Media Group (owned by AT&T), and Microsoft. Telewest owned Cable London, a cable operator, jointly with NTL before acquiring NTL's share of the company in 1999. (Cable London is now a wholly-owned subsidiary of Telewest.) NTL and Telewest are joint owners of Front Row, a PPV service. Telewest is currently planning to merge with Flextech, one of the largest providers of basic (non-premium) channels for pay-TV, which currently has Liberty Media Group as a major shareholder. In October 1999, Telewest launched its digital TV service, which is to be made available to new customers in 90 per cent of its homes by July 2000. Telewest has franchises in Edinburgh, Newcastle, Liverpool, Birmingham, Bristol and London, and surrounding areas.

Other cable operators

4.62. There are currently two other operators of cable networks in the UK: Atlantic Telecom Group (Aberdeen) and Eurobell (Holdings) (South Devon, West Kent and Crawley). There are also four other holders of exclusive franchises. The ITC told us that none of the latter had begun network build in any of its franchises.

British Sky Broadcasting Group plc

4.63. BSkyB (a UK-based company) is by far the largest DTH/satellite operator in the UK. Its main shareholder is News International, which has a wide range of business interests including Hollywood film production (20th Century Fox); equity interests in satellite platforms outside the UK; a one-third stake in Stream, an Italian DTT broadcaster; and, through its NDS subsidiary, in the conditional access technology used by BSkyB. As well as controlling and providing a number of channels directly (Sky One, Sky Sports etc), BSkyB also has a number of subsidiaries, including SSSL (which provides conditional access services; see glossary) and Sky Ventures Ltd, which manages BSkyB's interests in joint venture channels such as Nickelodeon, National Geographic, History Channel etc. It also has equity interests (of less than 10 per cent in each case) in several UK football clubs: Manchester United, Leeds United, Sunderland (all Premier League) and Manchester City. BSkyB recently entered into an agreement under which it would acquire a 25 per cent equity stake in KirchPayTV, the leading pay-TV operator in Germany; this is being considered by the European Commission (DGIV).

ONdigital plc

4.64. ONdigital is the main DTT operator. It was originally a joint venture between BSkyB, Carlton and Granada, until BSkyB was forced to withdraw by the ITC. It operates over three of the six multiplex licences for digital terrestrial transmission, and as a result has greater capacity, in terms of number of channels, than the operators of any of the other three multiplexes (BBC, Digital 3 and 4, and SDN). Its capacity is, however, smaller than that of BSkyB's digital and the cable companies' digital services, and the ITC estimated its coverage at 75 to 86 per cent, although ONdigital told us that its marketable coverage at present is 50 to 60 per cent of UK households. Nevertheless it has achieved around 6 per cent of the UK pay TV market (by number of subscribers—around 2 per cent by revenue) since its launch in late 1998.

Pay-TV subscribers, revenues and market shares

4.65. The size of the UK pay-TV market, and operators' market shares, are conventionally measured both by number of subscribers and by revenues. As regards subscribers, the number of homes (and other premises) taking pay-TV increased substantially throughout the 1990s. Table 4.3 gives details of the numbers of pay-TV subscribers (analogue and digital combined) in the UK in the years 1997 to 1999, and the corresponding market shares of BSkyB, the cable operators and ONdigital. As shown in the table, the number of subscribers grew by nearly 22 per cent (1.3 million) over this two-year period, reaching a total of 7.1 million across the three delivery platforms, or about 30 per cent of all UK homes. Estimates of future growth vary, but the BBC told us that the take-up of pay-TV was likely to exceed 50 per cent of UK households within five years, but could plateau at 55 to 60 per cent thereafter.

TABLE 4.3 **Pay-TV subscribers in the UK and suppliers' market shares, 1997 to 1999**

	'000			% market share		
	1997*	1998†	1999‡	1997*	1998†	1999‡
Platform/suppliers:						
DTH/BskyB	3,532	3,547	3,582	60.5	55.7	50.4
Cable operators:						
Telewest	691	1,000	1,124	11.8	15.7	15.8
NTL	309	812	1,062	5.3	12.7	14.9
CWC	738	822	864	12.6	12.9	12.2
Other cable	<u>571</u>	<u>192</u>	<u>63</u>	<u>9.8</u>	<u>3.0</u>	<u>0.9</u>
Total cable	2,309	2,826	3,113	40	44.3	43.8
DTT/ONdigital	<u>0</u>	<u>0</u>	<u>411</u>	<u>0.0</u>	<u>0.0</u>	<u>5.8</u>
Total	5,841	6,373	7,106	100	100	100

Source: Commission, based on data from CWC.

*BSkyB as at 30.6.97 and cable operators as at 31.12.97.

†BSkyB as at 30.6.98 and cable companies as at 31.11.98.

‡All companies as at 30.9.99.

4.66. BSkyB has long been the largest retail supplier, although its market share (by number of subscribers) has fallen in the second half of the 1990s, mainly reflecting the expansion of cable networks. Indeed, its share declined from some 73 per cent in 1994 (see BSkyB/Manchester United report, Table 4.4) to 50 per cent in 1999. In 1998, BSkyB lost 4 per cent of market share to the cable companies; and in 1999, it lost a further 6 per cent, which appears to have been largely taken up by ONdigital (launched late in 1998). BSkyB's subscriber base grew only slightly over this period (from 3,532,000 subscribers in 1997 to 3,582,000 in 1999). BSkyB told us, however, that its digital service and its free set-top box offer had been successful in stimulating its subscriber base, which it expected to grow further over the next few years.

4.67. As regards the cable platform/operators, the total subscriber base has trebled since 1994, from under 1.0 million then to 3.1 million in 1999. As shown in Table 4.3, the number of subscribers grew by 35 per cent in the two-year period 1997 to 1999, and the cable platform's national market share rose from 40 to 44 per cent in total. Within that the number of subscribers and market shares of both NTL and Telewest increased substantially over the period (though the growth of CWC was less marked). In 1999, Telewest's share at the national level was 16 per cent, NTL's was 15 per cent and C&W's was 12 per cent.

4.68. As regards the local level—the geographic areas where the cable operators are active—[
Details omitted. See note on page iv.
]. BSkyB told us that it had produced these figures, that they referred to June 1998, and that by September 1999 NTL's share had grown to [] per cent (in cable active areas as defined by BSkyB), CWC [] per cent and Telewest [] per cent (these updated figures do not include franchises acquired since 1998). We note that these shares are based on number of subscribers. As such they do not take account of the higher take-up of premium channels, and therefore greater value, of BSkyB subscribers; albeit that this is due to the difference in the marketing strategies adopted by cable companies to that of BSkyB (see paragraphs 4.78 and 4.106).

4.69. BSkyB's method of deciding whether an area is 'cable active' (ie passed by a cable network) is based on its own data and those of the ITC. Franchise areas in which 100 per cent of the franchise is passed by cable are deemed to be cable active. In franchises where less than 100 per cent of homes are passed by cable, BSkyB analyses each postal sector in the franchise. It starts with those postal sectors where BSkyB has seen the highest rate of cancellation to cable (Sky asks all cancelling subscribers why they are cancelling), assigns them as cable active and then passes on to the sector with the next highest rate. This process continues until the number of homes accounted for by those postal sectors matches the ITC's published figure for homes passed in that franchise.

4.70. CWC told us that cable companies do not have the information on BSkyB's activities necessary to establish local market shares, but it believed that an 80 per cent share could be held by a cable company only in franchise areas in which BSkyB's ability to offer its service was limited. NTL told us that it had no knowledge of local market shares, and that the market for pay-TV was national. We note that, as there is little or no overlap across franchises, there will be no increase of the market share of the enlarged company in its individual franchise areas.

4.71. [*Details omitted. See note on page iv.*] Because of the recent acquisition by NTL of several other cable networks, there are limited historical data available. We note that between September 1998 and June 1999 BSkyB lost around [] subscribers (net) in NTL's 'cable active' areas (excluding areas newly acquired by NTL over this period). However, over the same time period, BSkyB gained [] subscribers in the cable active areas of CWC and Telewest. Looking at the period from March 1999 to September 1999, and including NTL's recent acquisitions of Comtel, Diamond, Comcast Teeside, Comcast Cambridge and BT Westminster, BSkyB actually gained [] subscribers in NTL's cable active areas. BSkyB attributed this to the launch of its digital service and introduction of free set-top boxes.

4.72. Individual cable operators are able to increase their subscriber base in essentially three ways: through mergers with other cable operators, extending their networks, and increased penetration (take-up of services) within the areas they already cover. Mergers have been one of the main reasons for the growth in subscribers (and market share) over this period of both Telewest and more markedly NTL, as is suggested by the rapid decrease in the number of subscribers belonging to cable companies other than the top three (in Table 4.3).

4.73. On network build, Table 4.4 shows the number of homes passed—homes with access to cable should they choose to subscribe—for each of the cable operators in the period 1997 to 1999. Overall, the number of homes passed by cable increased by 14 per cent between 1997 and 1999 (to a total of 12.2 million). By contrast, the number of subscribers (as mentioned above) increased by 35 per cent. This appears to indicate an increase in penetration rates within existing network areas. However, CWC told us that this is more likely to be due to the acquisition of subscribers in new areas where networks had been built prior to 1997, and in which penetration had not reached normal levels by the date in 1997 when the market share was measured. In 1999, about 50 per cent of all UK homes had access to cable networks: the 1999 level of 3.1 million cable TV subscribers is equivalent to an average penetration rate of 25 per cent.

TABLE 4.4 Number of UK homes passed by cable networks, in the years 1997 to 1999

	'000		
	1997	1998	1999*
Cable operators:			
Telewest	3,097	4,227	4,222
NTL	861	2,789	3,540
CWC	3,694	3,908	3,926
Other cable	<u>2,716</u>	<u>981</u>	<u>484</u>
Total	10,368	11,904	12,171

Source: Commission, based on ITC data.

*As at 1.7.99.

Note: Figures may not sum exactly because of rounding.

4.74. As with DTH/satellite, ONdigital's DTT service offers coverage to a majority of UK homes (although it estimates marketable coverage at 50 to 60 per cent of homes—far less than that of BSkyB). It also offers set-top boxes free of charge to subscribers who sign up for a 12-month period. By October 1999, ONdigital had grown its subscriber base to 0.4 million, and by the year-end it was about 0.5 million. ONdigital told us that it was hoping to secure a total of around 1.0 million subscribers by the end of this year (2000). We note that ONdigital's market entry and growth has not led to a decline in the number of either DTH/satellite or cable subscribers.

4.75. Turning to pay-TV revenues, Table 4.5 provides details of retail subscription, including PPV, and channel advertising revenues combined, of which retail subscription revenue is by far the major component. Total revenues measured on this basis were £2.0 billion in 1999. Within that total, BSkyB accounted for £1.3 billion or 64 per cent and cable operators accounted for most of the rest at 34 per cent or £0.7 billion. ONdigital forecasts that its revenues will expand from £40 million in 1999 to £170 million in 2000 and £300 million in 2001.

TABLE 4.5 Revenues (retail subscription and advertising) and market shares of pay-TV operators in 1999*

	£m	%
BSkyB†	1,321	64.0
Cable operators:		
Telewest‡	265	12.8
NTL‡	178	8.6
CWC	244	11.8
Other cable§	<u>16</u>	<u>0.8</u>
Total cable	703	34.1
ONdigital	<u>40</u>	<u>1.9</u>
Total	2,064	100.0

Source: Commission, based on the annual accounts of pay-TV operators.

*All figures are for the year ended 30 September 1999, except ONdigital, for the year ended 31 December 1999.

†BSkyB revenue excludes payment from cable companies (£265 million) and from ONdigital.

‡NTL and Telewest figures are adjusted for acquisitions.

§Other cable figure calculated by C&W using data from the ITC, Atlantic Telecom and Eurobell.

4.76. These figures, however, tend to overstate BSkyB's share of retail operators' revenues, because they include advertising revenues, which are more properly attributable to BSkyB as a channel provider, rather than as a platform operator. BSkyB is the largest such provider and has annual advertising revenues of around £200 million, compared with less than £5 million for cable operators, which buy in most of their channels, and have a very limited ability to insert advertising into the channels they carry. BSkyB's revenue share, excluding advertising revenues, would be around 60 per cent.

4.77. Nonetheless, BSkyB does achieve higher pay-TV retail subscription revenues per subscriber than do the cable operators. In part, this reflects differences in the so-called pay-to-basic ratio (the ratio of the number of subscribers taking premium channels to the number of subscribers taking basic channels). NTL, for example, has a pay-to-basic ratio of around 90 per cent, and C&W around 145 per cent, while BSkyB's is around 300 per cent. NTL told us that prices charged by BSkyB for its premium channels allow very low margins to the cable companies, so giving them little incentive to market these channels. The charges levied by BSkyB for its premium channels (and Sky One) are governed by a rate card, the discount structure of which is subject to regulation by the OFT. However, BSkyB determines the overall price level, subject to the accounting separation procedures imposed on Sky and the requirement, in the OFT Undertakings, for Sky's distribution business to be shown to make a profit.

4.78. Partly as a result of this, NTL told us that its marketing strategy in recent years has been to maximize its subscriber base, rather than revenue per subscriber, by appealing to households with a low interest in pay-TV, who may, however, be interested in receiving a basic pay-TV package along with the telephone service also provided by cable (see paragraphs 4.101 to 4.109 on bundling). The OFT recently announced its intention to review the rate card and the undertakings given by BSkyB, in the context of recent changes in the market.

4.79. Table 4.6 shows a breakdown of BSkyB's turnover in 1999. As mentioned above, BSkyB is also a major wholesale provider of channels. As a result, in addition to retail subscription and advertising revenues, it receives wholesale subscription revenues from other UK pay-TV operators/platforms carrying BSkyB channels: such revenues amounted to around £253 million in 1999.

TABLE 4.6 **BSkyB's turnover, year ending June 1999**

	<i>£m</i>
DTH/satellite subscribers (retail)	979.3
Cable and DTT subscribers (wholesale)	252.6
Advertising	216.5
Other	<u>96.6</u>
Total	1,545.0

Source: BSkyB annual report 1999.

4.80. While BSkyB receives an additional revenue stream from the wholesale market, cable companies also receive additional revenues from their other operations, of a kind in which BSkyB has limited or no involvement. Table 4.7 shows NTL's turnover for 1998 (the most recent year for which figures are available).

TABLE 4.7 **NTL's turnover, 1998**

	<i>£m*</i>
Local telecommunications and television	214.2
National and international telecommunications	149.9
Broadcast transmission and other	84.4
Other telecommunications	<u>1.4</u>
Total	450.0

Source: NTL annual report 1998.

*NTL turnover reported in \$, converted to £ based on average 1998 exchange rate of £1:\$1.66.

Prices

4.81. Table 4.8 summarizes the current offers available from the cable operators, BSkyB and ONdigital. CWC and Telewest are introducing digital services at present, while development of NTL's digital service has not yet been completed. BSkyB has stopped marketing its analogue service.

4.82. Channels are usually divided into premium and non-premium. The most commonly retailed premium channels are Sky Sports 1 and 2, Sky Premier and Sky MovieMax, along with FilmFour and Disney. The way in which premium and non-premium channels are packaged together varies between providers.

4.83. The minimum price at which one can subscribe to each of the operators, so as receive a limited number of non-premium channels (referred to as the basic or access package), varies between £5.00 and £12.99 a month. Telewest's digital service, and those of BSkyB and ONdigital, have the lowest entry level price, but these do not include telephone line rental (Telewest provides line rental for an additional £8.00). NTL's basic entry package, at £9.25, is marginally less than that of analogue CWC (£9.99) (both include line rental). However, the latter includes 100 minutes of free local calls a month. CWC told us that the basic package price for its digital service is reduced from £12.98 to £9.98 if taken on a 12-month contract.

4.84. As Table 4.8 shows, there is a considerable difference in the channels included by each provider as part of its basic entry package, although for a subscriber whose only concern was access to a premium channel this difference would not be important. NTL, CWC and Telewest offer additional non-premium channels in themed groups of around five to ten, whereas BSkyB provides an additional 50 non-premium channels in a single group (the 'family' pack). NTL told us that BSkyB actively markets its family pack, but not its £7 'value pack'. BSkyB rejects this assertion and we note that details of the value pack are clearly given in its subscription contract, albeit that the family pack is given priority. There is a considerable difference in the price charged by operators for the package of all non-premium channels together, but these figures are not directly comparable, as they may reflect differences in the number and quality of channels included in each case.

4.85. Premium channels may be packaged in groups, separately, or with an incremental pricing structure (for example, Telewest charges £11 for any one premium channel, £15 for any two, £18 for any three and £20 for any four, or effectively £11 for the first, and £4, £3 and £2 respectively for the second, third and fourth).

4.86. The first set of prices for premium channels in Table 4.8 shows the minimum price payable by a subscriber (in addition to the basic entry price) for a single premium channel. For example, subscribers who wish to have Sky Premier from NTL must pay £16, although for £17 they could receive Sky Premier, Sky MovieMax and the Disney Channel. Telewest and ONdigital have the lowest price (£11) for a single premium channel, followed by CWC digital, BSkyB, and finally NTL. However, it could be argued that the basic entry packages of Telewest and ONdigital do not provide the same value for money as those of NTL and CWC, in that they do not include telephone line rental. BSkyB's basic offer includes a 40 per cent discount on standard rate calls over a BT phone (see paragraph 4.102).

4.87. FilmFour, which is generally not provided as part of a package of channels, has a standard price of £5.99 or £6.00 from all operators, although Disney, which NTL and BSkyB offer as a bonus channel with the premium movie channels, varies in price from £5 to £6.99 if sold separately. PPV movies appear to be uniformly priced at £2.99 or £3.00.

TABLE 4.8 Pay-TV offers available in January 2000

Technology	NTL	CWC		Telewest*		BSkyB	ONdigital
	Analogue	Analogue	Digital	Analogue	Digital	Digital	Digital
Basic package price	£9.25	£9.99	£12.98	£12.99	£5.00	£7.00	£6.99
All non-premium channels price	£22.25	£20.99	£31.45	£21.99	£14.00	£13.00	£11.99
Four premium channels price†	£23.00	£24.00	£20.50	£20.00	£20.00	£23.00	£20.00
Installation cost	£25.00	£40.00	£50.00	£25.00	£50.00	£40.00	Free
Basic package includes:							
Set-top box	3	3	3	-	-	3	3
Telephone line rental	3	3	-	3	-	-	-
Free local calls	-	-	-	3	-	-	-
100 minutes local calls	-	3	3	-	-	-	-
TV e-mail	-	-	3	-	-	3	-
Interactive services	-	-	3	-	-	3	-
Channels in basic package:‡§							
BBC Choice	-	-	3	-	3	¶	¤
BBC Knowledge	-	-	3	-	3	¶	¤
BBC News 24	3	3	3	3	3	¶	¤
BBC Parliament	3	3	3	3	3	¶	¤
BBC Radio 1/2/3/4	-	-	3	-	-	¶	-
Bloomberg	-	-	-	-	-	3	-
The Box	-	-	-	3	-	-	-
Breeze	-	-	-	3	-	-	-
British Eurosport	3	-	-	3	-	-	-
Classic FM	-	-	3	-	-	¶	-
CNBC	-	-	-	3	-	-	-
CWC Movie Preview	-	-	3	-	-	-	-
Discovery Home and Leisure	-	-	-	-	-	3	-
First ONdigital	-	-	-	-	-	-	3
GMTV2	-	-	3	-	-	-	-
Guest Channel	3	-	-	-	-	-	-
ITV2	-	3	3	3	3	-	3
Living	-	-	-	3	-	-	-
Local Channel	3	3	3	-	3	-	-
Music Choice (10 audio channels)	-	-	-	-	-	3	-
Performance	-	-	-	3	-	-	-
QVC	3	3	3	3	3	3	-
Rapture	-	-	-	3	-	¶	-
Shop!	-	3	3	-	3	¶	3
Sky News	-	3	-	3	-	3	-
Sky One	-	-	-	3	-	3	-
TNT	-	-	-	3	-	-	-
Travel	-	-	-	3	-	¶	-
TV Travel Shop	3	3	3	3	3	¶	-
UK Horizons	-	3	-	-	-	-	-
Premium channel prices:#							
FilmFour	£ 6.00	£5.99	£5.99	£5.99	£5.99	£6.00	£5.99
Disney	£ 5.00	£6.99	£6.99	£5.99	£5.99	£5.00	N/A
Sky Sports 1	£16.00	See below	£12.50	See below	See below	£14.00	See below
Sky Sports 2	£16.00	See below	£12.50	See below	See below	£14.00	See below
Sky Premier	£16.00	See below	£13.50	See below	See below	£16.00	See below
Sky MovieMax	£15.00	See below	£10.99	See below	See below	£12.00	See below
PPV Movie	From £2.99	£2.95	£2.95	£2.99	£2.99	£3.00	N/A
Incremental premium channel prices:							
One	-	£15.00	-	£11.00	£11.00	-	£11.00
Two	-	£4.00	-	£4.00	£4.00	-	£4.00
Three	-	£3.00	-	£3.00	£3.00	-	£3.00
Four	-	£2.00	-	£2.00	£2.00	-	£2.00

Source: Pay-TV operators' sales brochures.

*Telewest offers digital services with and without phone line. Prices shown are without. Pack prices with phone line are £8.00 higher.

†The four premium channels referred to are Sky Sports 1 and 2, Sky Premier and Sky MovieMax. Prices quoted are additional to basic package price.

‡All basic packages include BBC1, BBC2, ITV, C4 and C5.

§ONdigital's basic package includes a choice of one 'primary' channel (non-premium).

¶BSkyB provide these and a number of other TV and audio channels free-to-air, so they are available to value pack subscribers

¤ONdigital offers these channels as free-to-air.

#CWC and BSkyB digital offers also include combinations of premium channels.

4.88. The relative value for money of each pack will vary according to the priorities of each subscriber. From an objective viewpoint it is not clear that one package will offer better value to all subscribers—indeed the pricing information tends to support the view that NTL and CWC are focused on the low-value end of the market. In general, it appears that no operator is consistently more or less expensive than others.

4.89. Wholesale prices charged by BSkyB to cable operators for BSkyB premium channels and Sky One are based on BSkyB's rate card (see paragraph 4.77) and ONdigital's prices are linked to those paid by cable. The mechanics of these prices are discussed in the Commission's BSkyB/Manchester United report, paragraph 4.62. In BSkyB's latest rate card (effective from 10 September 1999) wholesale fees payable to BSkyB for its premium channels are 57 per cent or 59 per cent of BSkyB's own retail subscriber price.

4.90. Wholesale prices agreed between platform operators and channel providers other than BSkyB are not subject to a rate card. In July 1998 the ITC prohibited the use of minimum carriage agreements by pay-TV channels. A minimum carriage agreement is an agreement between a channel provider and a platform operator which guarantees delivery of the channel carriage to a specified percentage of subscribers—usually around 80 to 100 per cent. In practical terms it would generally be necessary for a pay-TV operator to include such a channel in its basic package in order to meet the agreement. CWC told us that the pay-TV service provider must usually pay a per-subscriber fee to each channel provider. Thus, if a channel is included in the basic package the channel will receive a fee in respect of every subscriber of that operator, so the size of the basic package may affect the price to the consumer. The ITC felt that this reduced the level of consumer choice, as it meant viewers generally had no option but to take, and pay for, a large basic package of channels. Channel providers told us that the market power of platform operators (cable, satellite or DTT) had been enhanced by the abolition of minimum carriage requirements (MCRs).

4.91. Channel providers do, however, have the option of requesting minimum revenue guarantees as part of a carriage agreement, although these may not always be granted. NTL told us that recent agreements with certain channel providers have included such terms. However, one channel provider told us that the availability of minimum revenue guarantees depended on the bargaining power of the channel provider, and that its present guarantee with one of the cable operators was for a very low figure.

4.92. [

Details omitted. See note on page iv.

]

Barriers to entry

4.93. The pay-TV supply chain, illustrated in Figure 4.1, is composed of several different levels: rights suppliers, programme makers, channel providers (wholesalers) and pay-TV operators (retailers). NTL and CWC's involvement in pay-TV is primarily as retailers. However, NTL also has some involvement in channel provision, and its largest competitor at the retail level, BSkyB, is also a major channel provider to the UK market. We therefore consider barriers to entry by both channel providers and retailers.

4.94. There are two potential barriers to entry as a channel provider. The first is the need to acquire content to show on one's channels. Premium content (for example, live sports or first-run movie rights) is generally sold on an exclusive basis to one successful bidder. The limited availability of such content may cause the price to be bid up to a very high level relative to non-premium content. In addition, exclusive rights may be sold under contracts which allow one party to hold them for several years. For example, BSkyB has exclusive rights to UK Premier League football matches for four years until the end of the 2000/01 football season. ITV's contract for Formula One was originally for five years but has been extended to cover a further four years.

4.95. CWC told us it understood that, several years ago, BSkyB bought exclusive rights to premium movies from all the major Hollywood studios. CWC told us it believed that the contracts held by BSkyB

for movie rights were of relatively long duration. It said that BSkyB structured the timing of the contract renewals to avoid a situation whereby several studios' contracts would be up for renewal at around the same time; thus precluding a rival channel provider from signing up enough studios, at one time, to provide a viable premium movie channel in competition with BSkyB. BSkyB rejected this assertion and said that the expiration dates were determined by the studios themselves, and that its contracts with [*Details omitted. See note on page iv.*], expire on the same date. BSkyB also told us that it was feasible to enter as a basic channel with a range of content including some movies, to increase the proportion of movies as rights become available, and subsequently to be retailed as a premium channel. Film rights are discussed in Appendix 4.5.

4.96. Another option is to establish a PPV channel. CWC told us that it did not believe the studios included exclusive PPV movie rights in their contracts with BSkyB, and that as a result these rights were still available. Several PPV and dedicated movie channels have been established recently with some success: Front Row, FilmFour (owned by Channel 4) and u>direct. However, current market players may have an advantage over new entrants in providing such channels. Channel 4 provides content to FilmFour from its own library. NTL, which has an interest in ONrequest, a new PPV channel to be provided by SDN and ONdigital, told us that its contacts among holders of movie rights, resulting from NTL's involvement in the cable PPV channel Front Row, had been important in acquiring the rights needed to establish ONrequest (although Front Row has no involvement in ONdigital). It is also possible for companies, such as Flextech, to enter the market by providing non-premium channels, like Bravo, and so to have access to a wider variety of content at a generally lower price, or indeed produce their own content. However, one such channel provider told us that the secondary market for some non-premium rights has become increasingly competitive.

4.97. The need to negotiate carriage agreements with retailers is another potential barrier to entry as a channel provider. Cable operators have complete control over which channels are shown on their networks (see paragraphs 4.110 to 4.123 on open access). As regards satellite, a channel provider could rent space on a satellite and broadcast directly to satellite subscribers, although it would not, of course, have access to BSkyB's subscriber database and would have to market its channels independently. NTL told us that it expected capacity constraints (on the number of channels that can be shown) on the cable networks to be considerably reduced by the introduction of digital cable. BSkyB will also be able to broadcast a much larger number of channels on digital satellite than was possible on analogue satellite.

4.98. As regards the retail level, there appear to be a number of means by which a new player can enter the market. New entry may take the form of retailing over the DTH/satellite platform, building or acquiring a cable network (the remaining scope for which appears very limited) or entering via a new platform (for example, DSL). In addition, new entry may consist of providing a limited service, whether PPV or a single or small group of channels retailed by the channel provider, or it may consist of launching a full pay-TV service to compete with BSkyB, the cable companies and ONdigital. U>direct entered the market as an independent PPV service provider by leasing satellite space, and buying conditional access services from SSSL, a wholly-owned subsidiary of BSkyB. The Racing Channel, Zee TV, several 'adult' channels and a number of other pay-TV channels are also retailed over DTH/satellite, separately from the BSkyB service. As mentioned, the introduction of digital TV will greatly increase the number of channels available over cable and DTH/satellite, and NTL told us that it would be prepared to negotiate arrangements for channel providers to offer services over its digital network which would not necessarily be based on a flat rate carriage fee. The extent to which this will enable channel providers to act as their own retailer, for example by marketing directly to cable subscribers, is not yet clear.

4.99. As regards the use of new platforms, ONdigital entered the market in 1998 on the newly-created DTT platform, providing a full pay-TV service though with much less capacity than those of BSkyB and the cable companies, and had a market share of 6 per cent by September 1999 (see paragraph 4.64). SDN (part-owned by NTL) and ONdigital are currently developing a PPV channel for DTT, although its capacity will be limited.

4.100. NTL, CWC and Telewest told us that the roll-out of BT's DSL network, and the unbundling of its local loop, would increase ease of entry to the market, as new entrants would be able to provide pay-TV services over this network. This would enable new entrants to avoid building a distribution network themselves, or having to obtain access to a third party network. Video Networks and Kingston Communications (with BSkyB—see paragraph 5.60) are currently introducing VOD services using this technology, while Elmsdale Media has applied for a licence to provide TV services over BT's network (see paragraph 4.24).

Bundling of pay-TV and telecommunications

4.101. Cable networks in the UK are a combination of fibre-optic and coaxial cable (for TV delivery), and the twisted copper pairs traditionally used for telephony. As both can be provided over the same network, cable operators face lower costs ('economies of scope') in providing TV and telecommunication services (such as telephony and Internet access) together than the combined cost of providing the two services separately. Cable operators generally offer the two services to consumers as a single package, although CWC told us that it also offered them separately. It has been argued by their competitors that this gives cable operators an unfair competitive advantage both in pay-TV and in telecommunications, and reduces consumer choice.

4.102. BSkyB is unable to include telephony among the satellite-based services it provides to its subscribers. However, in response to the bundling of pay-TV and telecommunications by its cable competitors, the company currently offers digital subscribers a 40 per cent discount on standard rate calls from a BT telephone line. BSkyB told us that this did not offset the advantage enjoyed by cable companies, because by providing indirect access services BSkyB did not enjoy a revenue stream which is available to the cable operators. In addition, BSkyB's indirect access telephony required customers to obtain line rental separately from BT, and to use an access code, which was a deterrent to customers (see paragraph 4.51).

4.103. BT is restricted from supplying broadcast TV services under its main telecommunication licence until 2001. BT told us that even when this restriction was lifted it would not be able to offer an equivalent range of TV and interactive services as would then be available from cable providers. BT said that this was due to the technical capabilities of the DSL-based services which it would shortly deploy (see paragraph 4.24). However, NTL told us that the next stage of DSL technology would be able to deliver a full range of pay-TV services to compete with cable, DTH and DTT, and that BT could offer all TV services everywhere except where an exclusive cable franchise existed.

4.104. In April 1999 the ITC and OFTEL issued a joint consultation document on the bundling of TV and telephony by cable operators. The document remarks that 'Other things being equal, the cost sharing involved in the joint supply of both television and telephony services (economies of scope) will lead to lower total costs (and potentially lower prices to consumers)'. The document quotes an estimate by an unnamed third party that for a typical entry-level TV and telephony bundle with a total cost of £12, the common cost of providing both services is £2.70, while £4.56 is directly attributable to telephony and the remaining £4.74 to pay-TV. However, several competition concerns are raised in the document, by the ITC/OFTEL and by unnamed third parties.

4.105. A key issue raised in the document is the effect of bundling on consumer choice. It is in the interests of cable operators that as many of their customers as possible take both services rather than one only. Cable operators may therefore refuse to supply one service separately, or discourage consumers from taking only one service by offering it with an artificially high price. For example, NTL charges as much for provision of a telephone line as it did for the joint provision of a telephone line and a basic entry level pay-TV service. NTL told us that it did offer the alternative of a second telephone at no extra charge to customers who did not want pay-TV. However, NTL refuses to supply a telephone line separately at a lower cost than that charged for a telephone line and pay-TV together.

4.106. Consumer choice is also restricted if the consumer is not made aware that the two services are available separately. NTL said that it bundled its TV and telephony and marketed this bundled product strongly. The fact that around 93 per cent of NTL customers take both services could be seen as evidence of the success of this marketing strategy.

4.107. Several other issues were raised by the ITC/OFTEL and unnamed third parties in the consultation document. If a cable company has market power in pay-TV there may be scope for the company, via bundling, to leverage its market power into the telecommunication market, ie by offering a price for the telephone line to its pay-TV subscribers, with which other telephone suppliers cannot compete. There may also be effects on competition between pay-TV suppliers, as competing platforms cannot offer telephone and pay-TV together at a price that competes with the cable companies.

4.108. The potential for NTL and CWC to distort competition in this way could be of concern, if it was concluded that cable companies have market power at present, or that the enlarged NTL will have market power as a result of the merger. We note, however, that NTL and CWC currently face powerful

competitors in both the pay-TV and telecommunication markets—BSkyB and BT respectively. It is likely that the practice of bundling will continue to be monitored by the ITC and OFTEL for the foreseeable future.

4.109. The ITC and OFTEL provisionally concluded, on 8 February 2000, that there is no basis at this time to take action against the cable operators in relation to the practice and pricing of bundled telephony and TV services, and noted that the situation will be kept under review and may be revisited if market conditions change materially (see paragraphs 2.65 to 2.67).

Access to cable networks

4.110. Under existing regulations cable operators have complete control over which channels they carry, and any channel provider wishing to use a cable system must negotiate a carriage agreement with the cable operator, who then retails channels to subscribers. In the case of the satellite platform, any channel providers who were not able to agree terms with BSkyB to carry their channels could use the satellite system to broadcast channels directly to DTH/satellite subscribers. In order to do this, a channel provider could rent transmission services, and space on the satellite transponder, and buy conditional access and access control services from BSkyB, which is required by the ITC/OFTTEL (see Appendix 4.2) to offer these services to third parties on fair, reasonable and non-discriminatory grounds. Such a channel provider would then have to market its channels in competition with BSkyB.

4.111. BSkyB has argued that the ability of cable operators to discriminate between third party channel providers, in deciding which channels can have access to their networks, is a source of market power and leads to a number of distortions to competition, and that the merger would increase that market power.

4.112. A channel provider told us that it had a high proportion of fixed costs, which created a need to maximize advertising and subscription revenues by having its channels shown on all platforms. Therefore it could not credibly threaten to withhold channels from cable providers. BSkyB told us that for this reason cable companies were in a position to pay very low wholesale prices to channel providers, who had no option but to accept their terms. NTL said, on the other hand, that some channel providers themselves had countervailing market power, because the demand by subscribers for their channels made them a 'must take' product. This was evidenced by the ability of channel providers to negotiate favourable terms, including (until recently) MCRs (see paragraph 4.89) and minimum revenue guarantees. However, MCRs have recently been abolished by the ITC, and one channel provider told us that a cable company had refused it a minimum revenue guarantee (see also paragraph 4.91). NTL also said [

Details omitted. See note on page iv.

].

4.113. In NTL's views these points indicated that cable companies did not have unlimited bargaining power in their negotiations with channel providers. However, this may not be the case for all channel providers, particularly those of specialized, non-premium channels.

4.114. BSkyB also claimed (see paragraph 5.103) that the ability of cable companies to foreclose access to their networks gave them (the cable companies) an incentive to vertically integrate (ie to become involved in programming) and use their power as platform providers to gain an unfair competitive advantage in channel provision. For example, a cable company with ownership links to a channel could give that channel an unfair advantage by refusing to carry any channels which competed directly with it. We note that Telewest and NTL have recently increased their involvement in content provision. Examples of this are Telewest's proposed merger with Flextech, a channel provider, the establishment of the PPV channel Front Row (a joint venture between NTL and Telewest) and the proposed PPV channel ONrequest (a joint venture between ONdigital and SDN, the latter part-owned by NTL).

4.115. Interactive services have allowed a new form of content provision to come into being. Open (the interactive channel carried over DTH/satellite and part-owned by BSkyB) told us that NTL, which is developing its own interactive service, had refused to carry Open over its cable network. In response, NTL said that although it maintained contact with other ‘aggregators’ of interactive content and services it was ‘not minded at present’ to carry Open’s services. It said that both Open and NTL functioned as aggregators of content, bringing in similar partners to offer similar content with a user interface that was consistent with their other digital TV branding. NTL’s customers were therefore likely to be confused to have another interface within the services, and would receive little or no benefit from the content. In addition, Open’s service was more limited as it did not allow user access to all Internet sites as NTL’s service would, and had been written for a proprietary software platform not supported by NTL’s cable digital service.

4.116. Open rejected the assertion that its service was more limited and believed that, were it given the opportunity to compete, its service would be seen as a substitute for, or chosen in addition to, unfettered Internet access. It said that its service delivered a quality of video and sound that was not generally available on the Internet, had been designed to be simple and intuitive in use, and was suitable for use by minors without supervision. BT, a major shareholder in Open, told us that the service was created to be accessed using any telecommunication line or communication network or system.

4.117. BSkyB told us that another result of the closed nature of cable was that it gave cable operators an unfair advantage over other platforms in bidding for rights. The argument was that rights suppliers wished to ensure that they reached the widest possible audience. BSkyB said that, when bidding for rights, it could not guarantee that it would reach cable customers, but a cable operator could, if it chose, rent space on a satellite transponder and thus guarantee that it would reach both cable and satellite audiences. As a result, cable operators were always in a position to outbid any other potential bidders for rights. Three counter-arguments can be made on this point. We note that, at present, BSkyB has a far greater share of important content rights than all the cable companies combined, and that the premium content channels owned by BSkyB are shown on all the cable networks, thereby enabling content providers to access this cable audience. Furthermore, none of the UK cable operators have, to date, chosen to rent space on a satellite in order to win a bid for sports rights. However, it remains possible that they will do so in the future. In an analogous argument to that of BSkyB, Open told us that, as regards interactive services, a key competitive advantage would be the ability to reach the largest number of homes. It said that while Open would not be able to provide its service to cable customers without the agreement of the cable company concerned, the enlarged NTL could reach two-thirds of cable homes immediately and, when it so chose, also deliver its interactive service on the satellite platform.

4.118. The cable companies rejected claims that the closed nature of their networks gave them an unfair competitive advantage. They said that they had, at present, limited analogue capacity (of around 40 channels), so that for every channel that was allowed on to their system another had to be dropped. Given this capacity restraint, the basis for determining which channels should be shown over the cable network was principally the interest of cable operators in providing the combination of channels that would maximize the attractiveness of their offering to customers. NTL told us that it conducted regular and extensive market research to determine which channels were most popular among its subscriber base, and that it was in the context of this research that decisions were made as to which channels should be listed. CWC also uses market research for this purpose.

4.119. This degree of capacity constraint is, however, unlikely to last very long. When the cable operators have completed their transition to digital, and switched off the analogue signal, their capacity will be increased between six- and eightfold, albeit that a large proportion of this capacity will be used in the provision of interactive and PPV services. NTL told us that the enlargement in capacity would greatly increase the demand for content, thus enabling many more small channel providers to reach their audiences through cable.

4.120. As regards the terms on which channel providers will be able to do this, there is a limit to the amount of extra channels that a cable operator will be prepared to purchase at the current price. NTL said that it might negotiate alternative arrangements with channel providers. Telewest told us that some of the agreements between cable companies and content providers for digital carriage ‘broke new ground in terms of revenue and cost arrangements’. Channel providers have complained to us about the cable operators’ wish to secure shares of advertising revenue from the channels they showed on the digital platform.

4.121. As regards the degree to which the satellite platform is open to channel providers, NTL told us that it was unlikely that a small channel provider would have the resources to rent transponder space, and pay for the transmission and conditional access services needed to retail via satellite. Such a provider would probably need to find several other channels willing to do this in a joint venture. It would also have no control over its position on BSkyB's EPG. In response, BSkyB pointed out that every channel provider must rent transponder capacity and obtain transmission services irrespective of whether it retailed through BSkyB or independently. It said that the only additional distribution charges attached to retailing independently were those for conditional access and EPG services, and that both of these were regulated by OFTEL and must be fair, reasonable and non-discriminatory. In addition, listings on the EPG must be made on a fair, reasonable and non-discriminatory basis.

4.122. NTL also pointed out that such a channel provider would not have access to BSkyB's subscriber base for marketing purposes. It said that in practice the channels which had chosen to deliver in this manner tended to be niche channels such as The Racing Channel, which could access its market via betting shops, as a way of building its customer base. A channel provider told us that BSkyB had excessive power in negotiations with channel providers, despite operating a supposedly open system, and that this system was not, in effect, open, because of the channel provider's reliance on subscription fees from BSkyB's subscribers. We note, however, that a number of channels are currently being carried on the analogue satellite platform without being retailed by BSkyB, including The Racing Channel, Zee TV and both dedicated and PPV adult channels. The same channels are also available on the digital platform along with several others including Bangla TV, Pakistani TV, Asia One and u>direct. Indeed BSkyB told us that 52 TV channels, 20 radio channels and Open were all operated on digital satellite independently of BSkyB (although we note that a majority of the channels listed are free-to-air, that BBC1 England, BBC1 Scotland, BBC1 Wales etc have been counted as separate channels, and that u>direct's PPV film service accounts for 11 channels).

4.123. OFTEL told us that in the near future it expected to examine the possibility of requiring cable companies to open their networks, and that it did not consider open access to be an issue that arose as a result of the merger (see paragraph 5.22).