OFFICE OF FAIR TRADING

Completed acquisition by Macquarie UK Broadcast Ventures Limited of National Grid Telecoms Investment Limited, Lattice Telecommunications Asset Development Company Limited and National Grid Wireless No.2 Limited

The OFT's decision on reference under Section 22(1) given on 8 August 2007. Full text of decision published 15 August 2007.

Please note that square brackets indicate figures or text which have been deleted or replaced with a range by the OFT or at the request of the parties for reasons of commercial confidentiality or public interest.

PARTIES

1. **Macquarie UK Broadcast Ventures Limited** (Macquarie), a wholly owned indirect subsidiary of Macquarie UK Broadcast Holdings Limited, owns **Arqiva Limited** (Arqiva). Arqiva is the owner and operator of broadcast and wireless communications infrastructure in the UK. Arqiva's main business is the provision of facilities and services to the media, wireless and public safety communications industries. The business includes a national broadcast transmission and mast network infrastructure, which operates in the UK, and its public safety services operations which operate in the UK and Ireland.

2. **National Grid Telecoms investment Limited, Lattice Telecommunications Asset Development Company Limited, and National Grid Wireless No. 2 Limited** (together NGW) is a UK broadcast and telecom infrastructure provider. It operates in three areas: broadcast masts and transmissions, wireless site leasing, and build and broadcast multiplex operation. Its 2006 UK turnover was £ 287 million.

TRANSACTION

3. Macquarie completed the acquisition of NGW on 3 April 2007. The statutory deadline expires on 31 August 2007 and the administrative deadline expires on 14 August 2007.

JURISDICTION

4. As a result of this transaction, Macquarie and NGW have ceased to be distinct within the meaning of section 26(1) of the Act. The UK turnover of

NGW exceeded £70 million for the 2006 financial year. The turnover test pursuant to Section 23(1) (b) of the Enterprise Act 2002 (the Act) is therefore satisfied. The OFT believes therefore that a relevant merger situation under Section 23(1) of the Act has been created.

RELEVANT MARKETS

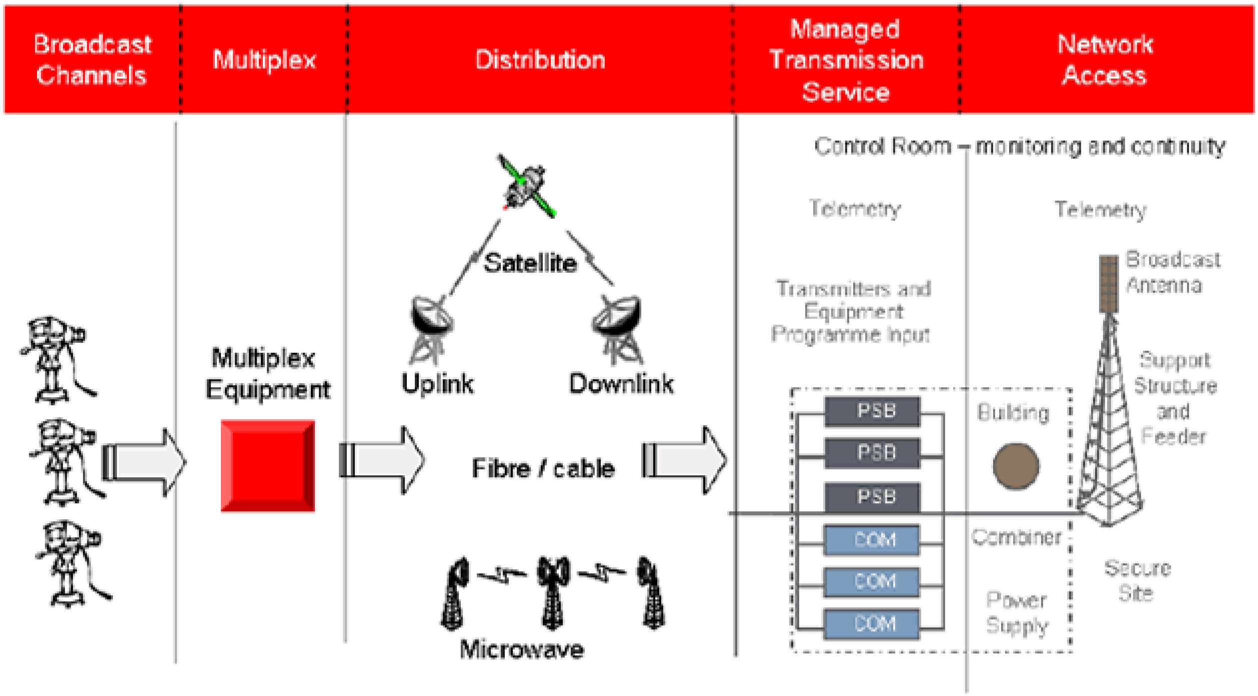
Terrestrial broadcasting in the UK

5. Terrestrial broadcasting in the UK is delivered over a network of masts and sites spread across the country. These masts and sites are used to broadcast (television and radio) signals to end-consumers, that is, viewers and listeners. Both Arqiva and NGW have a portfolio of sites (including masts, buildings and shared equipment) which are suitable for the transmission of terrestrial broadcast services including in the wireless communications sector. Arqiva and NGW also supply a range of managed transmission services to broadcasters under, usually, long term supply agreements.

Terrestrial transmission services

6. Terrestrial transmission services can be described as the point-to multipoint conveyance of the broadcast signal to the listener's or viewer's receiver be it in their home (television) or car (radio). Broadcast signals are initially conveyed from the studio (or play-out centre) over a distribution network.[1] Distribution typically involves point-to-point conveyance to the start of the transmission network, and is carried out using optic fibre, satellite or microwave links or a combination of these technologies. This is shown in the diagram below.

[1] Digital transmission requires an additional layer: the multiplex operator. It involves combining the signal of a number of channels (or radio stations) to transmit in one single signal.



Source: Arqiva

7. NGW and Arqiva overlap in the supply of terrestrial transmission services to radio and television broadcasters, multiplex operators and wireless telecommunication operators. This comprises services at two closely interlinked layers, as indicated in the diagram above: (a) access to sites and masts (network access) and (b) the provision of associated services (managed transmission services – 'MTS' – or 'ancillary' services, depending on the sector).

8. Network access[2], is subject to regulation by the Office of Communications (Ofcom), which includes the obligation upon NGW and Arqiva to produce a public Reference Offer and having network access services provided only via an MTS provider.[3]

9. Managed transmission services (MTS)[4] is the combination of network access together with the supply of transmission services[5]. In the regulated segments, multiplex operators and/or broadcasters do not contract with the

[2] It includes site access, site accommodation, shared combiner systems, shared feeder systems, shared antenna systems, provision of bespoke antennas and feeders and main power or diesel generator infrastructure.

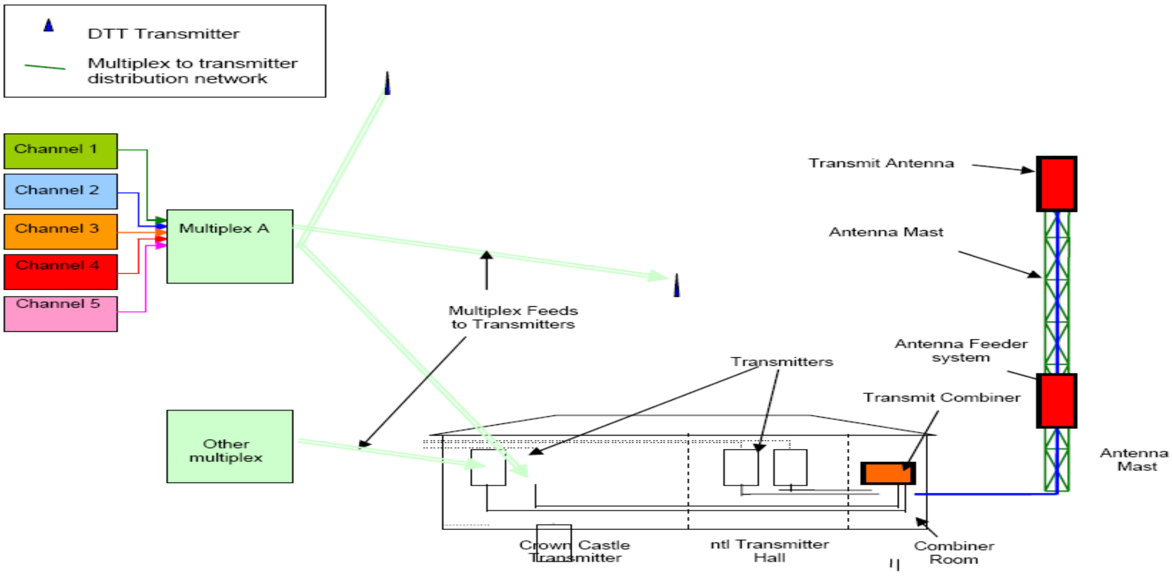
[3] See at http://www.ofcom.org.uk/consult/condocs/bcast_trans_serv/final/mastsites.pdf

[4] The Significant Market Power (SMP) NGW and Arqiva enjoy with respect to their respective sites at Network Access level for national television, national AM, FM and regional and metropolitan FM radio transmission led Ofcom to request the separation of the provision of MTS and Network Access. Ofcom imposed the obligation to permit Network Access to third parties on the basis of published Reference Offers (RO). These ROs must be non-discriminatory and cost orientated. The aim was to encourage competition at the MTS level.

[5] Transmission services, in the broad sense, involves the design and installation of a transmitter network and the provision of certain field management and maintenance services including field maintenance and support, electricity, insurance, service management and monitoring.

network access providers directly[6] but their contract is with the MTS provider who will manage any contact with network access providers. This MTS contract contains both the network access tariff and the transmission service costs. For television, the network access tariff represents between 75 and 80 per cent of the total MTS cost.

10. The diagram below shows the different hardware components of network access and MTS with network access being relevant, broadly, to the mast, the installations on the mast and including the transmit combiner and MTS including the transmitters and ancillary equipment within the building.



. Note: Crown Castle is now NGW; NTL is now Arqiva

11. These activities – and overlaps – are centred on three sectors, namely (i) radio; (ii) television; and (iii) wireless communications. The technical and supply characteristics, nature of demand and the different requirements suggest that each sector should be assessed separately. Third parties (including Ofcom) have not disputed this view.

Terrestrial transmission technologies: analogue and digital

12. Terrestrial transmission can be achieved via both analogue and digital technologies. For television, digital technology can either be the existing low power with frequencies allocated to individual broadcasters[7] or the forthcoming high power (DTT)[8] where several channels will be able to use the same frequency by compressing and combining the signal into a 'multiplex'.

[6] In effect, NGW and Arqiva as network access providers.
[7] Freeview is transmitted via low-power digital technology.
[8] Digital terrestrial television

13. A Government initiated digital switchover (DSO) for terrestrial television is underway, scheduled to be completed by 2012.[9] For the purpose of this assessment the distribution chain is substantially the same and the competitive impact of DSO is noted as required in the competition assessment section below.[10] For radio, where Digital Audio Broadcasting (DAB) is the common digital form of radio, no decision has yet been made for a similar switchover.

Competition from other platforms

14. Arqiva has submitted that other transmission platforms such as satellite and cable compete with terrestrial transmission. Third parties have told the OFT that at present, they do not consider other platforms as substitutes to terrestrial television transmission but complementary though the OFT notes that the market is dynamic. Some broadcasters, (public service broadcasters) have a regulatory obligation to be present in all platforms.

I RADIO

Network access

15. Radio is transmitted via Long Wave (LW)[11], Medium Wave (AM) and FM frequencies. In addition, DAB transmission is being introduced. LW transmission is not affected by this merger and is not assessed any further.

16. AM[12] and some FM[13] radio stations as well as two DAB[14] multiplexes are (or will be) transmitted nationwide. Radio stations broadcasting in sub-national geographic areas (that is with regional, metropolitan, local or even at community[15] coverage) use FM frequencies.

17. Ofcom has considered two separate markets for the provision of network access to radio broadcasters: (i) national, regional and metropolitan radio, in which NGW and Arqiva were found to have regional monopolies; and (ii) local radio broadcasting.[16] Arqiva agrees that different market conditions exist for these two separate groups of customers.

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[9] DSO consists of the process by which analogue broadcasting and low power digital will be progressively 'switched off'. High power digital television will then become the standard technology.
[10] In radio, Digital Audio Broadcasting (DAB)
[11] For example BBC Worldwide Service
[12] Virgin AM, TalkSport and BBC Five Live
[13] BBC Radio 1,2, 3 and 4 and Classic FM
[14] Digital 1 and Digital 4, which has just been awarded.[Endnote 1]
[15] This refers to radio stations broadcasting in university campus, hospitals and similar very localised areas.
[16] See at http://www.ofcom.org.uk/consult/condocs/bcast_trans_serv/final/mastsites.pdf

18. Radio broadcasters are not obliged to transmit from any specific site, however radio licences, other than national, will be for a designated transmission area and the radio signal must not exceed that area.[17]

19. With regard to national AM radio transmission, there is very limited scope for the substitution of sites belonging to NGW and Arqiva. This is not only for historical reasons,[18] but also because the method of transmission[19] and the licences which determine the frequency make the use of other national radio or television masts unviable alternatives, and the switching cost to other sites has been considered too high. Thus, the OFT has concluded that national AM radio transmission forms a separate frame of reference in which NGW and Arqiva did not compete prior to the merger and it is therefore not considered further in this assessment.

20. For national FM radio transmission and DAB the OFT has been told that it is necessary to use sites from both parties to achieve national (or near national) coverage.[20] The preferred option for customers is to locate the FM transmission antennae on the sites also used for national television broadcasting because these high power masts transmit the signal over larger areas. The television transmission sites were historically developed by 'television regions',[21] with the predecessors of Arqiva and NGW owning sites in different 'television regions.' This created in essence 'regional monopolies' with very limited scope for substitution between the NGW and Arqiva's sites (see further under 'Television').

21. Some third parties noted that there are up to 11 locations where, exceptionally, there are 'pairs' of sites which were operated (prior to the merger) by the two parties. Different issues (including capacity constraints, coverage, interferences and different maximum heights) make switching difficult in practice and costly, in particular once the network is established. Also, the OFT notes that the regulatory system Ofcom set up to address the situation at network access level (which includes the obligation to publish Reference Offers[22]) does not distinguish between these 11 sites and those in the rest of the country. Thus, on the basis of the evidence before the OFT, the OFT has concluded that the provision of network access for national FM radio (and DAB) is a separate frame of reference in which there was very limited, if any, scope for competition prior to the merger and therefore this segment is not assessed further in this decision.

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[17] Although for DAB, Ofcom has published the Reserved Assignment List (RAL) listing the recommended sites from which DAB providers can transmit without causing interferences or interferences are known and manageable.

[18] AM radio stations transmit from NGW sites (formerly BBC sites) plus an additional independent site.

[19] For AM transmission, the whole mast is 'live' and transmits the signal.

[20] For FM national coverage between 40 and 60 sites are required throughout the country.

[21] See further in paragraph 27 [Endnote 2] below.

[22] See further at footnote 4 above

22. The provision of network access for sub-national radio can be segmented further between local radio and regional and metropolitan radio, though some third parties have acknowledged that the borderlines may be blurred as the number of sites and specifications will depend on each individual case. For completeness, the OFT has assessed the impact of this merger distinguishing between local radio and regional and metropolitan radio transmission.

Network access for local radio

23. The location of the sites for the provision of network access for local radio is location-centric. The sites are selected by the radio broadcaster (or its MTS operator such as NGW and Arqiva) to target the specific geographical coverage area with the frequency and power the broadcaster has been licensed to operate. The location of the antenna (singular or plural) is essential to achieve the targeted audience which in turn attracts commercial advertising revenues. On the basis of the evidence before the OFT, it does not believe that this merger may lead to a substantial lessening of competition with respect to local radio broadcasters. This is because customers have a wide range of other alternative independent providers of sites/masts, including self-supply (on their own buildings), and barriers to entry (in terms of new sites) are lower than for national radio transmission. The OFT notes that Ofcom's careful assessment of this segment in 2005 concluded that it did not require any regulation (as opposed to its findings for national and other sub-national radio transmission segments).

Network access for regional and metropolitan radio

24. Network access for regional and metropolitan radio faces a combination of issues akin to those discussed above for national FM and local radio. Similar to FM national radio transmission, NGW and Arqiva's high power masts are largely complementary and both would be required to achieve greater coverage. The final choice of sites is generally dependent on technical and capacity factors. Akin to local radio transmission, smaller relay or 'filler' sites may be necessary to achieve maximum coverage for the licensed area.

25. The merger therefore has a similar impact to that explained above for network access for national AM and FM radio transmission and for local radio. To the extent that radio broadcasters wish to utilise the larger masts of the parties (to give greater coverage) then these tend to be local monopolies and the parties are not suitable alternatives. To the extent that the radio broadcasters need to find relay or filler sites, then, as with local radio, the potential range of alternatives is wide. Thus the merger is not expected to lead any change in market structure for such customers and so

network access for regional and metropolitan radio broadcasters is not assessed any further in this decision.

Managed transmission services

26. MTS includes the design, installation and maintenance of the transmitters (one per broadcaster located at the base of the sites) and services (or some of them) detailed above[23]. The supply chain is not substantially different for MTS for AM, FM or DAB radio multiplex. The only addition is the additional stage filled by the multiplex operator for the provision of DAB.

27. It has been put to the OFT that national and sub-national MTS provision are in separate geographic markets. On the demand side, radio broadcasters may require a national or sub-national (including local) provision of MTS depending on the extent and location of its transmitters. This will be closely linked to the web of sites each station requires to broadcast at national and/or sub-national level - given that broadcasting coverage is determined by each station's broadcasting licence. On the supply side, a national MTS provider would require a nationwide field force able to provide timely maintenance and repairs across the country. Such a field force would also be able to provide MTS services at the local level. It is less clear, however, that local MTS providers could, either alone or in combination, provide a 'national' service. The OFT has not been provided with any examples of this happening. The OFT has therefore taken the prudent approach and considered national and sub-national MTS provision separately.

28. The question of whether sub-national MTS provision should be segmented further, that is distinguishing between MTS for regional and metropolitan and that for local radio can be left open as the competition assessment does not substantially change. For completeness we have considered both as a whole and segmenting local, metropolitan and regional MTS provision.

HORIZONTAL ISSUES

Provision of MTS for national radio broadcasters

29. Contracts for national radio MTS include agreements related to AM, FM and DAB.[24]

30. The merger has brought together the only two credible providers of MTS for the above (national) contracts. Arqiva and NGW's combined market share in this segment is therefore 100 per cent. On the basis of the evidence before the OFT, there have been no credible alternatives in the past and the OFT has not been presented with any convincing evidence suggesting that

[23] See footnote 3 [Endnote 3] and paragraphs 8 and 9.
[24] DAB is served by national radio multiplex operators.

customers have considered or will consider any other third party as a credible alternative for the foreseeable future.

31. Arqiva submits that the merger does not change the current position evidenced by the fact that there has been no historic switching of national radio broadcasters between MTS providers to date. The reason for this, according to Arqiva, flows from the incumbency advantage of owning the transmitters and the sunk costs it implies for any new entrant. It notes that whereas the transmission equipment for radio has a life of at least 20 years, national radio MTS contracts tend to be on average [confidential] years duration. As such, at contract renewal the incumbent provider, as the owner of the installed transmission equipment, has a strong advantage over competing providers.

32. Arqiva also argues that there will be no new national MTS contracts until at least 2012 when the conditions of competition may have substantially changed. Furthermore, it argues that there are some credible alternatives which could in effect enter this segment if the merged entity increased prices or reduced quality relative to absent the merger. Arqiva suggested three sources of possible entrants: VT Communications, which is currently providing Network Access and MTS for BBC Worldwide Service,[25] providers of sub-national radio MTS services and equipment manufacturers such as Ericsson, Thomson or Nokia which have the technical expertise to provide maintenance to its own transmitters.

33. All customers have told the OFT that the merged parties are the only credible alternative to provide national radio MTS services. All responses have noted that the competitive constraint each party impose on the other has brought some competition in the segment and that the merger removes any such existing rivalry.

34. The OFT contacted all the potential alternative providers for national radio MTS as put forward by Arqiva including suppliers of managed services in other segments, equipment manufacturers and radio broadcasters would start self-supplying. On the basis of the evidence before the OFT, mostly from customer responses and these potential providers, the OFT cannot be satisfied that they are credible alternatives able to provide sufficient, timely and likely entry into the market.

Barriers to entry

35. Customers on the one hand, and other suppliers which could conceivably have been considered a credible alternative, listed the most significant barriers to entry as including: reputation and existing commercial relationships, the presence of a UK-wide and skilled field force, economies of scale, economies of scope, longevity of contracts, sunk costs, and vertical

[25] BBC World Service transmits in LW frequencies from a limited number of sites in the UK and abroad.

integration. Some theoretical potential entrants added the lack of transparency and costs calculations in the Reference Offer for network access.

36. On barriers deriving from reputation and existing commercial relationships, Arqiva confirmed that there has been no historic switching. Given the critical importance of transmission, sophisticated customers are reluctant to test a new provider with no established record in the UK.

37. Arqiva also submits that the major source of economies of scale and scope in MTS relate to the field force. This has been noted by all responses elicited during the OFT's market assessment.

38. On the significant sunk cost any new entrant would face, Arqiva has acknowledged that the working life of the transmitters is longer than the average contract period and therefore the incumbent has a strong advantage over competing providers. The OFT has noted that some recent contracts already incorporate provisions to [confidential] facilitate the switch to a new MTS provider. This can be an example of competition in operation provided there are at least two alternatives to request offers from. Broadcasters have told the OFT that self supply is outside their core business and they lack the technical expertise to provide the necessary maintenance service.

39. Most third parties also pointed out that NGW and Arqiva are the only two providers which are vertically integrated. This, it has been said, gives them the opportunity to have access to know-how, price transparency and costs assessment, other providers would not have. Customers suggest that this deters new entry into the market. However, Arqiva has strongly denied that vertical integration represents any barrier to entry as the regulation in this market obliges NGW and Arqiva to grant access on transparent, fair, non-discriminatory and cost orientated terms.

40. In summary, the merger will reduce the number of credible competitors in the provision of MTS for national radio broadcasting from two to one with entry barriers being high. The OFT therefore believes that it is the case that the merger may be expected to result in a substantial lessening of competition in this market.

Provision of MTS for sub-national radio broadcasters

41. In 2005, Ofcom concluded that the market for sub-national radio MTS was effectively competitive. Its finding was based on competition between Arqiva and NGW, the existence of other competitors who could either provide the service through access to their own sites or provide a service through access purchased from third parties, including NGW and Arqiva which were regulated. It also noted the presence of some radio stations that self-provided MTS and that MTS for sub-national radio requires lower power transmission and technological complexity. Moreover, relatively smaller importance is attached to scale and scope economies.

42. Arqiva further argued that in this segment there are actual competitors with an estimated combined market share of [10-20] per cent (including self-supplied broadcasters) as well as some credible alternative potential providers (as noted above in paragraph 32 for MTS for national radio broadcasters) which could in effect enter this segment if the merged entity were to increase prices above, or reduce quality below, that which would have been the case absent the merger.

43. Arqiva also refers to the intrinsic link between site access and MTS and the distinction between regional and metropolitan broadcasting as opposed to local broadcasting which tends to require smaller masts (that is less than 50 metres) and lower power (that is less than 2kW erp[26]). Evidence before the OFT confirms that the competitive conditions in the market for local broadcasting are different as there is some degree of material substitution between sites.

44. The merged entity's estimated market share is [75-85] per cent (increment [15-25] per cent)[27]. Self-supplying radio broadcasters with an estimated market share of [5-15] per cent form the second largest group. Other listed alternative providers hold much smaller market shares: [below 5] per cent in one case and less than 1 per cent for the remaining four providers.

45. The OFT contacted radio broadcasters and the MTS providers Arqiva listed. The market investigation indicated that the radio stations where MTS providers other than Arqiva and NGW provide MTS services refer primarily to community and local radio stations (with limited exceptions of some metropolitan or regional broadcasters). These 'other' MTS providers explained to the OFT that they do not provide exactly the same type of service as Arqiva or NGW. They can provide a competitive service [to] this small group of customers that do not require the higher level of service that only Arqiva and NGW can offer.

46. This evidence suggests that these alternative MTS providers for sub-national radio contracts provide only a limited constraint on the parties prior to the merger and are not likely to be an effective constraint post-merger. In any event, that limited constraint benefits only radio stations of small size or limited geographic coverage.

47. Arqiva submits that the merged entity's combined market share is particularly high for historical reasons and the forthcoming sub-national MTS radio contracts will be in connection with new licences for small radio stations given the lack of spectrum available. This suggests that competition will take place in the sector where third party providers (or even self supply) impose some competitive constraint.

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[26] Effective radiated power, used in radio communications

[27] According to number of sub-national stations.

48. However, it is noticeable that MTS providers other than Arqiva and NGW, bid only in [0-10] per cent of the tenders[28] that the OFT has reviewed and manage to win [less than 5] per cent of the tenders the OFT has reviewed. Also, other radio broadcasters have told the OFT that their contracts will be up for renewal in the foreseeable future. The OFT does not expect that the competitive conditions will change so dramatically before 2008 when some of these sub-national contracts will be up to tender. Also, it is not an unusual practice for a radio broadcaster to seek to re-negotiate an extension of a contract prior to termination in an attempt to obtain better terms and conditions. Absence the merger, the broadcasting groups controlling many sub-national radio stations throughout the country (and which represents at least [confidential] per cent of Arqiva's FM revenue) have told the OFT that they would have no alternative but the merged entity.

49. The merger therefore reduces the number of credible alternative providers of MTS for a large group of customers in this segment from two to one. This appears to be a sector where MTS contracts would be expected to become available in the near future. Therefore, the merger might be expected to result in a substantial lessening of competition leading to higher prices and/or worse terms and/or reduced incentive for innovation and quality of services than would otherwise be the case absent the merger.

II TELEVISION

Network access

50. Terrestrial analogue television broadcasting is delivered over a network of 1,154 high masts - high power sites spread across the UK - of which 50 (Arqiva 22 and NGW 28) are classed as 'main TV sites' and the remainder are relay (or filler) sites. The current low power DTT (Freeview) uses 81 sites. Due to the historical evolution of the network, NGW and Arqiva own approximately half of the network infrastructure each. Each party's sites are scattered across the UK (by television region). This makes it necessary to gain access to the sites owned by both companies in order to cover the whole of the UK.

51. In 2005, Ofcom concluded that NGW and Arqiva effectively hold geographic monopolies with regard to their respective sites. Third parties responses supported this statement for the transmission of national television. The merger does not give rise to any change in the structure of the market nor to the absence of competition at this level and therefore this segment is not assessed further in this decision.

[28] Accounted on a collective basis

Managed transmission services

52. MTS for television broadcasters includes the installation and maintenance of transmitters ('boxes' on site), network monitoring, assuring the quality of the transmitted signal. It appears that an important element of the provision of MTS is the know-how required for the design, installation and maintenance of large MTS networks.[29] Given the national coverage the customers require and the national pricing policy, the geographic scope is national.

HORIZONTAL ISSUES

53. Arqiva submits that there will be no competition for MTS contracts for television until 2031/2038 at the earliest. By that time the competitive framework is likely to have completely changed and therefore that the merger cannot be expected to have any impact in the market. It also believes that any contention that competition for national television MTS contracts can arise before that time is 'speculative' as the possible use of any 'digital dividend'[30] will be subject to market conditions. In such conditions, the parties contend, the OFT cannot be sufficiently confident that any new multiplex operators will be awarded that spectrum.

54. Furthermore, Arqiva contends that there are credible alternative MTS providers. It lists several UK and non-UK based examples of companies which, according to Arqiva, would be considered 'credible alternatives' if prices increased above or quality decreased below levels that would have been the case absent the merger. In addition, Arqiva submits that the sectoral regulator, Ofcom has ample legal powers to place a regulatory framework to address any issues which could arise.

55. The OFT has assessed the likelihood the merger' impact on competition within different timeframes as follows.

Pre-DSO

56. The only remaining contract which has not been materially executed is very close to being signed. Arqiva was appointed 'preferred supplier' and expects to have that contract formally awarded.

57. As a result, on the basis of the evidence before it, the OFT agrees with Arqiva' submission that, it is not realistically foreseeable that there will be any competition before digital switchover is completed in 2012 with subsequent auction of spectrum dividend starting in 2013. The only caveat is some unexpected event such as the inability of one of the current

[29] See further footnote 3 [Endnote 4] and paragraphs 8 and 9 above.
[30] The 'digital dividend' refers to the spectrum which will be released post-DSO. One of the advantages resulting from DSO is that some spectrum would become available for other uses.

operators to fulfil their contracts which the OFT believes is too speculative to be relevant on these particular facts.

Post-DSO

58. However, the loss of competition for the provision of TV MTS is also particularly relevant to consideration of the potential for the emergence of a seventh or eighth DTT multiplex with near-national coverage. Ofcom is currently consulting on the process for awarding the digital dividend spectrum. Ofcom has proposed releasing the frequencies on a technology and service neutral basis. This policy would mean that the market, and not Ofcom, would determine how the spectrum is to be used. However, Ofcom's analysis and market intelligence (including Arqiva's own business papers) suggest additional DTT services are a plausible high value use of, at least, some of the spectrum that will become available. There is sufficient capacity for at least two further multiplexes with near-national coverage arising from the digital dividend. The emergence of a seventh (and perhaps eighth) multiplex is therefore a realistic potential outcome from the award of this spectrum which the OFT cannot dismiss as fanciful. This award is currently expected to occur in early 2009. Contracts for MTS services would then be required soon after (with transmission from 2013).

59. The barriers to entry which were identified for national MTS television are broadly similar to those addressed above with regard to national MTS radio.

60. The OFT believes that the nature and extent of the identified barriers of entry make it unlikely that these will be overcome in the short to medium term (if at all). In addition, though this is a dynamic market, a period of five to seven years from now does not seem sufficient to let a new technology develop to an extent that the competitive framework for television broadcasting changes dramatically. The OFT notes that technologies such as 3G (in telecommunications) are taking much longer than expected to fully become an alternative to earlier technologies.

61. The parties do not seek to question that MTS contracts will be up to tender again sometime before the end of their current periods (between 2031 and 2038). Given the overall outcome of this case, the OFT does not need to reach a conclusion on these long-run issues.

62. Other concerns third parties have raised refer to the risk that the customers might want to terminate the contract prior to termination due to failures in meeting the service levels standards or because the provider becomes unable to provide the service. It is arguable that such events are too speculative to form part of the competition assessment and that contractual provisions would usually provide the appropriate remedies for the latter but again, the OFT does not need to reach a firm conclusion on this issue.

63. In conclusion, the merger has resulted in a reduction of MTS providers for national television broadcasters/multiplex operators from two to one, leading to loss of competition in the market. There are high barriers to entry which are expected to last and the lack of a credible alternative provider replacing the loss of one of the only two existing competitors.

64. While the OFT accepts that competition for existing MTS contracts is distant, it cannot confidently dismiss the possibility of there being spectrum made available for future national DTT multiplex services (for which MTS would be required) in the relatively near future. On the basis of this latter timeframe, the OFT believes that it may be the case that the merger may be expected to lead to a substantial lessening of competition in the provision of MTS to broadcasters/multiplex operators for national television.

NON-HORIZONTAL ISSUES

65. Two (MTS and multiplex) customers were concerned that they will lose the opportunity to use an MTS provider which did not have any interest (prior to the merger) in multiplex services. The concern was that confidential information could, whether directly or indirectly, be passed from the MTS provider level to the multiplex sister company. As the OFT had found that the merger may lead to a substantial lessening of competition in other segments, it does not need to conclude on this point. However, Arqiva has pointed out that information, for example regarding any change in television channel line up, is already required to be provided by multiplex operators (to other multiplex operators) through Digital Multiples Operators Limited at least 30 days in advance. In its role as multiplexing services provided, Arqiva accepted that it would require such information but only within a similar advance timescale.

66. The OFT has also considered whether the merger gives rise to any conglomerate issues, given Arqiva's presence in the market for direct-to-home (DTH) satellite television broadcasting. The OFT notes that the customers are different (broadcaster as opposed to multiplex operators) and the value and duration of the contracts are also very different. Third parties confirmed that this form of bundling or any other form of combining market power at the two markets is not practiced.

III WIRELESS COMMUNICATIONS

67. The OFT considered this market in 2004[31] and concluded that the relevant frames of reference were: (i) the provision of site rental; and (ii) provision of ancillary services (including planning and design, assistance in radio

[31] Anticipated acquisition by National Grid Transco plc of Crown Castle UK Holding Limited (2004) (the Crown Castle decision) See at http://www.oft.gov.uk/advice_and_resources/resource_base/Mergers_home/decisions/2004/national-grid

frequency planning, general consultancy services, outsourced network management and portfolio management). That merger related to the provision of these services to mobile network operators (MNOs).

68. Arqiva submits that the relevant frames of reference for the present merger are similar to the Crown Castle decision. However, it appears to the OFT that given market developments since that decision a further segmentation is required. The OFT believes that the provision of site access to MNOs and the provision of such services to other wireless communication providers (WCPs) have different competitive constraints and technical requirements and therefore should be assessed separately.

69. Consistent with the Crown Castle decision, the OFT has concluded that it is still appropriate to consider the market as national in scope but with elements of local competition. The 'national' element is evidenced in particular by the national 'umbrella agreements' and national pricing that (portfolio) site owners such as Arqiva and NGW conclude with the users and the uniform pricing decision.

70. MNOs have different alternatives to source sites from (that is from their own portfolios, from other MNOs' sites and from independent providers), and a degree of buyer power as the MNO's licence coverage obligations have nearly been achieved and the sites of both parties are often more complementary than actual substitutes. Given the lack of concern from such customers, this segment is not considered any further in this assessment. Third parties did, however, raise some issues with respect to WCPs which are dealt with below.[32] There were no concerns raised with respect to the provision of ancillary services to MNOs.

71. NGW and Arqiva provide ancillary services almost exclusively for their sites only. Thus, any competition concerns would arise as a result of the market power they have at the site rental level and does not need to be dealt with separately.

72. The main concern third parties raised relates to the provision of site rental to other WCPs. The concern was based upon the contention that NGW and Arqiva own the largest nationwide portfolio of sites. It was argued that if a new customer requires network capacity to introduce a new wireless technology nationwide the only companies who can provide such coverage in the timely manner this sector demands are Arqiva and NGW.

73. Arqiva has estimated the merged entity's combined share of supply of active sites for wireless communications is below [15] per cent. Third parties responses have noted that NGW and Arqiva's networks are mostly complementary and tend to be used as part of site sharing or marketing agreements with other providers which facilitates nationwide coverage.

[32] See paragraphs 73-78 [Endnote 5] below

74. The theory of harm third parties have argued is based on the enlarged portfolio of sites the merged entity now controls. However, as indicated in the context of both site access for radio and television, all the evidence is that the sites owned by the parties are effectively local monopolies and are not substitutes. Moreover, the OFT notes that there are other providers building up large portfolio of sites. Therefore, the OFT does not believe that the evidence it has received is sufficient to meet the high threshold required to support a portfolio theory of harm.

EFFICIENCIES

75. Arqiva submitted that the merger leads to substantive merger-specific efficiencies which will be passed on to customers and ultimately consumers. It presented an assessment quantifying those efficiencies.

76. The OFT states in its Mergers Substantive Assessment Guidance[33] that efficiencies may be taken into account at two stages of the analysis. The first is where they increase rivalry in the market so that no substantial lessening of competition would result from the merger but this is not relevant in cases of mergers to monopoly in markets with high entry barriers. Second, via the customer benefits where the efficiencies do not avert a substantial lessening of competition in the sense of reduced rivalry but will result in clear merger-specific benefits passed on to customers, such that customers will, on balance be better off, or no worse off, than absent the merger.

77. The efficiencies associated with the merger argued by Arqiva and supported by some customers include (i) reduced transactional costs for customers in dealing with one supplier: (ii) reduction in the costs of and risks to DSO because of the benefits of intra-firm rather than inter-firm coordination and management; and (iii) post-DSO, similar coordination benefits of managing a single national portfolio of sites and services that could lower costs and improve response times.

78. However, Arqiva has not sought to argue or quantify that, absent a remedies package, the efficiencies of the transaction are of such a verifiable and quantifiable scale and scope so as to outweigh customer detriments that may arise. Rather, Arqiva argues that the merger-specific efficiencies in conjunction with the proposed remedies package (see undertakings in lieu, below) will resolve the relevant concerns. The OFT has no good reason in this case to reach a different free-standing conclusion on the impact of the efficiencies than that argued by Arqiva. In short, on their own, they do not resolve the OFT's concerns. In this respect, the OFT agrees that quantified efficiencies have been presented and also notes (i) the regulatory framework has set out that the network access providers can retain any efficiency gains until 2014 in order to encourage innovation and (ii)some MTS agreements

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[33] OFT 516 (Mergers (Substantive Assessment Guidance), paragraphs 4.29 and ff.

nevertheless already include contractual provisions to ensure pass-on of some of these efficiencies to customers (the gain-sharing provisions). This is not applicable to all contracts and there is no reason to think that, but for such contractual protection, pass-on of benefits to customers would occur independently post-merger; indeed, the contractual protection tends to suggest the opposite.

79. Accordingly, the customer benefits exception to the duty to refer does not apply.

THIRD PARTY VIEWS

80. The OFT contacted all the major customers, potential competitors and many other smaller customers in all the relevant sectors. All except two mobile network operators were concerned. These concerns have been raised above.

OFCOM VIEWS

81. Ofcom recognises that there are potential benefits associated with the merger, including efficiency gains that could to some extent be passed on to Arqiva's customers and the mitigation of some of the risks associated with the DSO programme.

82. However, Ofcom did express some concerns, including with regard to the removal of existing competition at the MTS level for national television and national and sub-national radio terrestrial transmission, and had some concerns regarding the loss of alternative sources of supply in some locations at the site access layer.

ASSESSMENT

83. As the following summary sets out, the OFT's concerns in this case focus on the fact that the transaction combines the only two vertically-integrated firms competing in the provision of MTS to both national radio and TV broadcasters, and a merger of by far the two largest firms in the provision of MTS to radio at sub-national level.

84. The parties overlap in the provision of site access for the purposes of (analogue and digital) terrestrial national television transmission; national AM; national FM; DAB and sub-national (further segmented to regional/ metropolitan and local) radio transmission. They also provide managed transmission services for the above and provide site rental and ancillary services to mobile network operators and other wireless communications operators.

85. The parties own the two complementary parts of the necessary site infrastructure required for terrestrial television and national FM radio

transmission and are, as such, operating as two separate geographic monopolies, suggesting there is no competition that could be lost by the merger. Moreover, this sector is regulated by Ofcom which has imposed the requirement to provide site access to all third parties on non-discriminatory and cost orientated terms. There are no overlaps in site access with relation to national AM radio.

86. There is more flexibility in terms of the sites to be used and the ease of switching (at least at the design stage) in the case of local radio – and also to a more limited extent in the case of regional/ metropolitan radio. Despite the parties' having comparatively large portfolios relative to the remainder of supply being fragmented across numerous independent providers, on the basis of the evidence before it, the OFT concludes that there is no credible theory that the merger will lead to a substantial lessening of competition in this segment because of the ability of customers to choose alternative third-party sites in relevant areas, and relatively low barriers to entry.

87. The transaction represents a merger to monopoly in the provision of MTS for national radio broadcasting. Radio contracts are shorter in duration than for MTS national television and at least one (for FM services but possibly also two more for AM services) is to be put out to tender in approximately two years' time. Given the high barriers to entry, the merger results in the removal of the only credible competitive constraint existing in this segment and consequently has resulted or may be expected to result in a substantial lessening of competition within the market for the provision of MTS for national radio broadcasters.

88. The parties are also by far the largest providers of MTS for radio broadcasting at a sub-national level. There are others who can provide these services but these are significantly smaller and their success rate in winning contracts is not comparable to the parties' record; some are also not active in providing all services that are typically included in MTS. This position is further strengthened by the fact that some of the local radio stations are part of larger groups which have a preference for concluding framework agreements (to minimise administrative and search costs). The merger removes the main competitive constraint in this segment and although there might be some alternatives for a limited number of customers, the OFT's overall conclusion is that the merger may be expected to result in a substantial lessening of competition.

89. The transaction also represents a merger to monopoly in the provision of MTS for national television broadcasters and multiplex operators. The OFT does not dismiss the possibility that bidding opportunities may arise in the near future for more national DTT contracts, given the release of spectrum following the digital switchover). Given the high barriers to entry that appear to be durable for at least the near future if not far beyond that, this post-merger monopoly raises substantial concerns by removing the only

foreseeable credible competitive constraint on each party absent the merger. Consequently, the merger may be expected to result in a substantial lessening of competition within the market for the provision of MTS for national television broadcasters and multiplex operators.

90. NGW and Arqiva also provide ancillary services for MNOs and WCPs mostly in relation to their sites. There was no substantiated concerns with respect to the provision of site rental to MNOs as the market's view was that the network are already nearly rolled out, the demand for new sites therefore is decreasing and this gives the MNOs greater buying power. There were no concerns raised with respect to the provision of ancillary services to MNOs.

91. The main issue with respect to site access/rental to WCPs arises as they are expected (with the forthcoming implementation or expansion of new technologies, platforms or applications) to require a significant number of sites. The OFT has not found any evidence to meet the high threshold required to support a portfolio theory of harm. The OFT notes that there are other providers building up large portfolios of sites. In any case, as the OFT has already concluded that the merger has resulted or may be expected to result in a substantial lessening of competition in other markets affected by this merger, the OFT does not need to conclude on this issue.

92. Consequently, the OFT believes that it is or may be the case that the merger has resulted or may be expected to result in a substantial lessening of competition within a market or markets in the United Kingdom that is: the supply of MTS to national radio broadcasters; the supply of MTS to radio broadcasters at a sub-national level; and the supply of MTS to national television and multiplex operators.

UNDERTAKINGS IN LIEU OF REFERENCE

93. Where the duty to make a reference under section 22(1) of the Act is met, pursuant to section 73(2) of the Act the OFT may, instead of making such a reference, accept from such of the parties concerned undertakings as it considers appropriate for the purpose of remedying, mitigating or preventing the substantial lessening of competition concerned or any adverse effect which has or may result from it.

94. The OFT has therefore considered whether there might be undertakings in lieu of reference which would address the competition concerns outlined above. The OFT's guidance states that in order to accept undertakings in lieu of reference '...the OFT must be confident that the competition concerns identified can be resolved by means of undertakings without the need for further investigation. Undertakings in lieu of reference are therefore appropriate only where the competition concerns raised by the

merger and the remedies proposed to address them are clear cut, and those remedies are capable of ready implementation[...]'[34].

95. Arqiva proposed a number of undertakings to the OFT, intended to address the potential competition concerns, in lieu of a possible reference to the Competition Commission.

96. The proposed undertakings comprise six options. Arqiva invited the OFT to accept each option individually or in any combination. Five were of a behavioural nature noting the context of the existing Ofcom regime and the gain share provision in some of the MTS contracts. Arqiva believed that the proposed remedies would reduce barriers to entry sufficiently to facilitate future entry; ensure price regulation in the supply of MTS going forward; and, ensure that a fair share of any merger synergies would be passed back to customers earlier than would otherwise be the case.

97. The sixth remedy consisted of Arqiva putting out to tender a contract for the provision of maintenance services in respect of the MTS element of the NGW-owned DTT multiplexes (multiplexes C and D). It did not include the design and procurement services (which are currently in progress).

98. For the following reasons, the OFT does not believe this set of proposed undertakings, in whichever combination, constitutes a clear-cut remedy, rendering it inappropriate for the OFT to suspend its duty to refer.

98.1. Option 1: The sale of stranded MTS assets and the implementation of a transition plan – the rationale of this option is to reduce the sunk costs related to the supply of transmitters and so facilitate switching. The OFT understands some contracts already include similar clauses (which suggest that customers had intended to encourage competition between the parties, as the major providers of MTS). To be successful, however, this remedy would require the existence of a credible alternative provider. As noted above, it is not clear that there is a credible alternative provider who could provide timely and sufficient entrant to restore competition at pre-merger level. In addition, this remedy does not, in itself, deal with the other sunk costs such as the creation of a skilled nationwide field force.

98.2. Option 2: Access to 'field force services' – by providing access to Arqiva's national field force this could reduce the barriers to entry at the MTS level. It would require Arqiva to produce a 'reference offer' based upon Arqiva's costs. It is not clear to the OFT that providing access to field force services at Arqiva's cost level adequately replicates pre-merger competition between the parties. Moreover, such price cap remedies require both that the original

[34] See paragraph 8.3 of OFT *Mergers Substantive Assessment Guidance*.

benchmark accurately reflects pre-merger competition and that any increases reflect the effects of competition that would have occurred absent the merger. Generally, this requires more detailed examination of costs and services than is possible without further detailed investigation. The complexities of this market do not suggest to the OFT that this would be a clear-cut remedy.

98.3. Option 3: Price regulation of MTS - to substitute competition with price regulation in MTS. This Option does not seek to restore competition but to replicate the benefits of competition through regulation. Through its focus on price regulation of a monopolist, rather than competition between a duopoly of vertically-integrated competitors, this remedy does not endeavour to replace some of the elements in place at the time regulation for Network Access was designed and implemented by Ofcom, the most significant being the existence of rivals to provide sophisticated challenges to each other on aspects such as costs or innovation. On price aspects alone, for the reasons mentioned regarding Option 2, the regulation of pricing behaviour requires a greater knowledge of input costs and service provision than is possible without further in-depth investigation, which it is not appropriate for the OFT to pursue in lieu of the Competition Commission in this case.

98.4. Option 4: Is any combination of Options 1, 2 and/or 3 - the intention being to lower the barriers to entry in order to facilitate new entrants in the MTS market. For the reasons above, the OFT is not convinced that replacing the loss of actual competition with the possibility of potential competition at some point in the future is a clear cut remedy. This is particularly relevant in this case as the history of the market shows that third parties identify NGW and Arqiva as the sole credible alternatives for most segments of the MTS market.

98.5. Option 5: Pass back of synergy benefits – ensuring that customers receive a proportionate share of synergy benefits created through the merger. Some contracts already allow for such pass-through of any efficiency benefits, this undertaking would extend such benefit to contracts that do not specifically allow for this. While limited in value, the OFT accepts that this undertaking would provide merger benefits for some customers.

98.6. Option 6: Maintenance services contract - Arqiva proposes to tender a contract for the provision of maintenance services in respect of the MTS element of the NGW-owned DTT multiplexes. The successful bidder could rely, if necessary, upon access to Arqiva's field force (Option 2). Arqiva believes that any successful bidder would be immediately 'credible' – as demonstrated by the fact that Arqiva had effectively outsourced part of the MTS provision to that company. It is not obvious to the OFT, however, that the proposed maintenance services contract will give the necessary economies of scale and scope of NGW and Arqiva pre-merger given their extensive portfolio of MTS contracts and the need to provide network access maintenance as well. The scale advantage NGW and Arqiva enjoy could represent a barrier too high for any new entrant to compete against successfully. Moreover, in the event of any failure by this maintenance company, Arqiva would be able, relatively quickly, to remedy this. This option would not be available to other potential customers and so it is difficult to conclude that such entry would clearly be credible.

98.7. In addition, the OFT notes that the (potential) up-front entrant will not get the experience required for design and implementation of the MTS service which is very relevant at the time of performing MTS services and can prevent the new entrant from developing the necessary know-how to provide similar competitive constraint on the merged entity as NGW and Arqiva imposed on each other pre-merger.

98.8. The question for the OFT is whether lowering these barriers to entry would provide a third party with the necessary reputation and credibility such that it would be able to replicate the competition in MTS provided by NGW pre-merger. This appears doubtful and in any event is not an issue which the OFT could resolve without now embarking upon a further in-depth assessment.

99. Accordingly, while the OFT accepts that some of these remedies might be able to address some of the concerns identified above it is not sufficiently confident that this would provide a clear cut remedy to address all of the concerns. Therefore, the OFT has decided not to exercise its discretion under section 73(2) of the Act to consider whether to accept undertakings in lieu of a reference.

DECISION

100. This merger will therefore be referred to the Competition Commission under section 22(1) of the Act.

ENDNOTES

1. Correction – Digital One and 4 Digital
2. Correction – Paragraph 50
3. Correction – Footnote 5
4. Correction – Footnote 5
5. Correction – Paragraphs 72-74