



# Radio - Licensing Policy for VHF Band III, Sub-band 3

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## Section 1

# Executive Summary

- 1.1 Ofcom published a consultation document on the licensing of spectrum in VHF Band III, sub-band 3 on 19 October 2005.
- 1.2 This proposed to allocate four blocks of spectrum in VHF Band III, sub-band 3 to Terrestrial Digital Audio Broadcasting (DAB) digital radio, under the terms of the Broadcasting Act 1996 (the Broadcasting Act). Three of the blocks would be used for local multiplexes, with the aim of filling in the gaps between existing local multiplexes, so ensuring that every part of the UK would have the opportunity to receive local DAB digital radio services. The fourth block would be used to provide a national DAB digital radio multiplex as Ofcom considered that this represented the optimal use of the spectrum in the best interests of citizens and consumers. The consultation closed on 16 November 2005.
- 1.3 Following consideration of the responses to the consultation, this statement sets out Ofcom's final decision on these proposals.
- 1.4 The responses to the consultation were broadly positive, with many respondents agreeing with Ofcom's proposals for the allocation of spectrum to local and national DAB multiplexes and to these being licensed under the terms of the Broadcasting Act.
- 1.5 However, some respondents raised a number of concerns:
  - 1.5.1 Options for use of the spectrum: Some respondents argued that Ofcom had not considered all of the options in coming to its recommendations. Ofcom does not accept this criticism and considers that all relevant options for the use of the spectrum have been considered. This issue is addressed in paragraphs 4.4 to 4.9 of this statement.
  - 1.5.2 Analytical process: Some respondents also claimed that Ofcom had not conducted a proper analytical process, and in particular that Ofcom had failed to conduct a proper impact assessment. Ofcom does not accept this criticism and considers that it has given due consideration to the likely impact of its proposals. It has also been claimed that Ofcom has failed to consider properly the relevant evidence. Ofcom does not accept this criticism. This issue is addressed in paragraphs 4.10 to 4.46 of this statement.
  - 1.5.3 Digital migration path for all existing and planned analogue stations: Some independent stations and smaller radio groups expressed concern at the lack of an obvious route for the migration of all analogue stations to digital, although there were differing views as to what the solution might be – from the use of capacity on DAB to the creation of new platforms such as Digital Radio Mondiale (DRM). Ofcom's view is that this is an important policy issue, which requires further work during 2006, but that it would not be in the best interests of citizens and consumers to allocate the fourth block of spectrum for further local multiplexes, for several reasons. This issue is addressed in paragraphs 4.47 to 4.58 of this statement.
  - 1.5.4 Licensing regime: Some respondents argued that Ofcom should be allocating any spectrum for a national multiplex under the Wireless Telegraphy Act only,

without a Broadcasting Act multiplex licence. Some respondents expressed concern about the assignment of capacity that could be used for data services using the Broadcasting Act, on the grounds that this could lead to a distortion of competition compared to access to spectrum for similar services via auction. Ofcom's view remains that the licensing of local and national multiplexes under the Broadcasting Act is the most effective and appropriate means of securing Ofcom's policy objectives. Ofcom also considers that the assignment of spectrum under this mechanism is compatible with its duties in relation to competition, and does not in itself imply a distortion of competition. This issue is addressed in paragraphs 4.59 to 4.65 of this statement.

- 1.5.5 Technical standards and platforms: It was also argued by some respondents that the current coding system used for DAB is out of date, and that an alternative coding system, Advanced Audio Coding (AAC), could deliver benefits in terms of capacity. Ofcom considers that any change in technical standards now would raise significant issues in relation to consumer and citizen protection, and the further development of the market for digital radio. Ofcom is not therefore minded to propose at this stage any change in the technical standards included within regulation, though it will keep these standards under review. This issue is addressed in paragraphs 4.81 to 4.91 of this statement.
  - 1.5.6 Conduct of consultation process: Some concern was also expressed about the conduct of Ofcom's consultation process. Ofcom is satisfied that the consultation process has been conducted appropriately and fairly. This issue is addressed in paragraphs 4.97 to 4.105 of this statement.
  - 1.5.7 Digital One, the licensee of the current national commercial radio multiplex additionally argued that <redacted> that it would be the "one and only" licensee of the national multiplex for the 12 year initial term of its licence and accordingly Ofcom was precluded as a matter of law from awarding a further national commercial multiplex licence until 2011. Ofcom does not agree <redacted> and has previously concluded that it is not precluded as a matter of law from awarding a further national licence.
- 1.6 Ofcom's decision, subject to the outcome of the Regional Radio Conference (RRC) on international spectrum usage and the vacating of the spectrum by existing users, is to allocate four blocks of spectrum in VHF Band III, sub-band 3 to DAB digital radio services:
    - one for a further national commercial radio multiplex; and
    - three to provide further local radio multiplexes, with the primary objective of extending the coverage of local digital radio services to those areas of the UK that are currently not served.
  - 1.7 Ofcom has also concluded that all of these multiplex licences should be awarded under the terms of the Broadcasting Act.
  - 1.8 The accompanying document, *The Future Licensing of DAB Digital Radio*, published simultaneously with this statement, sets out for consultation the proposed licensing process, the way that Ofcom proposes to apply the statutory criteria, the proposed local areas to be licensed and the proposed timetable for advertising local and national licences.

## Section 2

# Introduction

### Previous consultations

- 2.1 The question of the allocation of spectrum in VHF Band III, sub-band 3 has been considered a number of times since 2003.
- First, in a consultation initiated by the Radiocommunications Agency and the Radio Authority in 2003, which asked for views on the use of this and other spectrum;
  - Second, in *Radio – Preparing for the future* (phase 1), published by Ofcom in December 2004, which set out proposals to facilitate the growth of DAB digital radio by allocating more VHF Band III, sub-band 3 spectrum for local and national DAB multiplexes; and
  - Thirdly, in the consultation document *Radio - Licensing Policy for VHF Band III, Sub-band 3*, published by Ofcom in October 2005 (the consultation document).

### The latest consultation

- 2.2 In the most recent consultation document, Ofcom set out fully its approach to the licensing of this spectrum.
- 2.3 The document began by setting out Ofcom's duties and functions, which include:
- 2.3.1 Principal duties – to further the interests of citizens in relation to communications matters and the interests of consumers in relevant markets, where appropriate by promoting competition
  - 2.3.2 Spectrum duties – including securing the optimal use of the electro-magnetic spectrum and having regard to the different needs and interests of all who may wish to make use of the spectrum for wireless telegraphy
  - 2.3.3 Radio broadcasting duties – including the availability throughout the UK of a wide range of television and radio services which (taken as a whole) are both of high quality and calculated to appeal to a variety of tastes and interests; and the maintenance of a sufficient plurality of providers of different television and radio services.
- 2.4 The consultation document then considered all of the issues that need to be addressed in considering the allocation of the available spectrum in VHF Band III, sub-band 3: the timing of the release of the spectrum, whether it could be released in a way that would allow alternative uses and what the implications of that might be in terms of aspects such as technical restrictions, geography and the licensing regime.
- 2.5 Ofcom's approach to spectrum management was generally set out in its Spectrum Framework Review (SFR) published on 28 June 2005. The SFR advocates a market-led approach which would allow the market to decide on the best use for the spectrum, allowing licence holders to trade spectrum in an open market and to change the use they make of spectrum, thus facilitating the development of new technologies and innovative services.

- 2.6 However, the SFR also acknowledges that there are certain areas in which trading and liberalisation cannot be fully applied. These include broadcasting, which is subject to national broadcasting legislation and a number of international agreements.
- 2.7 The consultation document set out that, in deciding how to allocate spectrum, Ofcom might in some cases need to consider the case for intervening in order to secure a particular public policy objective. It suggested that such interventions should be rare and exceptional, that they must pass demanding tests for justification, and the document considered the analytical approach that should be taken in the present case.

### **Further local multiplexes**

- 2.8 The consultation document suggested that extending the availability of local digital services to areas that are not presently served by local digital radio should be an important public policy objective. This is because such a policy would reduce geographical inequities in access to services and promote greater variety and choice in the relevant areas for consumers. The policy would also facilitate the migration of the BBC's local and national services to DAB, consistent with the Broadcasting Act. The consultation document considered the evidence in support of such an approach from audience research and the responses to the previous consultations.
- 2.9 The consultation document proposed that the appropriate means of pursuing this objective would be to seek to extend the coverage of local digital radio multiplexes using DAB technology. The document also set out Ofcom's view that, without regulatory intervention, this objective was very unlikely to be achieved, as the required local coverage plan would not be profit-maximising.

### **Further national commercial multiplex**

- 2.10 The consultation document considered the optimal allocation of the four blocks of spectrum presently expected to be available in VHF Band III, sub-band 3, taking into account a wide range of alternative uses and policy options, and noting the inter-relationship between the quantity of spectrum used for purpose and the optimal quantity of spectrum for other purposes.
- 2.11 The consultation document noted that the use of available spectrum for a further national multiplex would have a number of benefits in terms of the efficient use of spectrum to benefit citizens and consumers, and the provision of services offering choice and diversity to listeners over the widest possible coverage. The provision of services on the DAB platform would in addition ensure that services were accessible in ways that would meet listeners' expectations and preferences for portability and mobility since the DAB platform is the platform which currently best delivers portable and mobile radio services.
- 2.12 The document considered the balance to be struck between these considerations and other relevant factors, including the desirability of ensuring that listeners have access to a range of services with local identity. Ofcom considered a range of factors to be taken into account, including: the technical efficiency of spectrum use, and constraints associated with frequency re-use for local services; the evidence of demand available from the radio industry (including potential new entrants) for the release of additional spectrum for national sound services; the evidence of consumer views in relation to use of spectrum; and other considerations, such as potential

effects on competition and potential effects on existing national and local multiplex operators and service providers.

- 2.13 Ofcom considered carefully the suggestion that it should prioritise the use of any spectrum that would be available (after allocating spectrum to fill in gaps in local service coverage) to secure a digital migration path for all existing local analogue services, rather than providing additional national services. Ofcom recognised the desirability of ensuring that as many analogue stations as possible have the opportunity to migrate to a digital platform, albeit there is no right to such migration. However, Ofcom considered that this aim had to be tempered by considerations of practicality and economic efficiency, arising mainly from the technical characteristics of DAB.
- 2.14 Ofcom considered that the provision of three blocks for additional local multiplexes would be the most appropriate allocation, balancing the public policy objective of securing as great a granularity as possible in the coverage of local digital services against the opportunity costs of the intervention.

### **Opportunity costs**

- 2.15 Ofcom also considered the opportunity costs of its proposals. It recognised that these may be significant, partly because these frequencies have good propagation characteristics which allow networks to be deployed at low cost and partly because there are already alternative uses for the spectrum in this band and for adjoining bands. In particular the spectrum is suitable for data and multimedia services (such as video and television services), for private mobile radio (PMR) and public access mobile radio (PAMR).
- 2.16 While recognising these opportunity costs, Ofcom concluded that they are outweighed by the public policy reasons for allocating the spectrum to DAB.

### **Competition and other considerations**

- 2.17 Ofcom considered the impact that use of this spectrum could have on competition, given Ofcom's duty to further the interests of consumers by promoting competition where appropriate. Ofcom considered that the release of additional spectrum for the purposes proposed in the consultation document would benefit competition, by creating additional opportunities for entry at both the multiplex level and the service provider level.
- 2.18 Ofcom considered in the consultation document the possible impact of a further national multiplex on Digital One (the holder of the only current national commercial radio multiplex licence), the holders of local radio multiplex licences, and digital-only stations, and it took this consideration into account in reaching the proposals in the document.

### **How should the spectrum be licensed**

- 2.19 The consultation document also considered how the proposed local multiplexes and the proposed further national multiplex should be licensed. It proposed that all these multiplexes should be awarded under the terms of the Broadcasting Act.
- 2.20 It noted that the proposal for local multiplexes is consistent with the licensing regime for existing multiplexes, and that there were a number of specific policy objectives that would need to be secured however the national multiplex is licensed, including

- achieving a certain minimum level of coverage of the UK (to ensure that any new radio services carried are made available to the greatest number of consumers and citizens);
  - ensuring that new digital sound programme services are provided;
  - ensuring that these services increase listening choice, and appeal to a variety of tastes and interests;
  - ensuring that the service is made available to listeners in the way that they expect (i.e. on mobile and portable devices which are widely available).
- 2.21 While these conditions could be achieved without the use of a Broadcasting Act licence, Ofcom considered that there seemed little to be gained from licensing as a Wireless Telegraphy Act general multiplex (i.e. without a Broadcasting Act licence) if the conditions imposed by the Wireless Telegraphy Act licence were similar to those that in any event would be included in a Broadcasting Act licence.

### **Proposals in the latest consultation**

- 2.22 The consultation document concluded by setting out proposals, which are subject to international agreement at the RRC in 2006 and the vacating of the spectrum by existing users, to allocate four blocks of VHF Band III, sub-band 3 spectrum to DAB digital radio. One of the four blocks would be used to provide a further national commercial digital radio multiplex. The other three blocks would be used to provide local digital radio multiplexes with the aim of extending coverage to those areas that are not presently covered. This would provide for around 30 local digital multiplexes. It might also be possible to provide second (or third) local or regional digital radio multiplexes to areas which already have one (or two), subject to demand.

### **Purpose of this document**

- 2.23 This statement summarises the responses to the consultation document and sets out Ofcom's consideration of the issues raised and evidence provided in those responses. It then sets out Ofcom's decision on the use of the spectrum having taken full account of the responses.



## Section 3

# Summary of consultation responses

- 3.1 The consultation *Radio – Licensing Policy for VHF Band III, Sub-band 3* sought views on the following question:

“In light of the further evidence presented in this document, Ofcom proposes to allocate three blocks of spectrum in VHF Band III, sub-band 3 for local radio multiplexes under the licensing process set out in the Broadcasting Act 1996, with the aim of covering geographical areas that do not presently have local radio multiplexes. Ofcom also proposes to allocate one block of spectrum in the same sub-band for a national radio multiplex under the licensing process set out in the Broadcasting Act 1996.

“Do you agree that these proposals represent the optimal use of the spectrum?”

- 3.2 There were 41 respondents to the consultation, which closed on 16 November 2005, including a number of responses that were confidential, either in whole or in part. The responses are summarised in this section and the issues raised are considered in section 4. A table listing the issues raised by respondents and Ofcom’s responses to those issues is included at Annex 1.
- 3.3 Over half (23) of the responses were from operators in the radio industry. Many of the commercial radio groups responded, including GCap Media, Emap, Chrysalis, GMG, Virgin, UBC and a confidential respondent as well as others involved in radio broadcasting including Digital One, the BBC, and Channel 4. There were responses from the two largest transmission providers (Arqiva and National Grid Wireless) and four trade bodies or special interest groups, including CRCA. In addition, there were responses from other interested parties including the Highways Agency, Orange, BT and Nokia, and four responses from individuals. All of the non-confidential responses to the consultation are available on the Ofcom website, [www.ofcom.org.uk](http://www.ofcom.org.uk).
- 3.4 Respondents to the consultation were generally supportive of the proposal. Many felt that it represented an appropriate balance between ensuring that spectrum was made available to allow the UK to be covered by local DAB services, while also ensuring increased choice for listeners through a further national multiplex.
- 3.5 The majority of the organisations that expressed a view agreed with the proposals in their entirety, while others agreed with the proposals in part. In general those who supported the proposals considered that they would allow for local DAB digital services to be available in each part of the country while the new national multiplex would increase the choice of services available to everyone. There was also widespread support for all new multiplexes, local and national, to be awarded under the terms of the Broadcasting Act.
- 3.6 Of the larger radio groups, most agreed with the proposals due to the beneficial effects that they considered the new national and local multiplexes would have on the further growth and development of the DAB platform generally and on the increased choice for listeners.

- Chrysalis said that local multiplexes would allow “a variety of programming tailored to each area’s tastes and interests” while a new national multiplex would give impetus to manufacturers, provide more brands for advertisers, deliver more marketing and more listener choice, all of which they felt would be in the interests of all commercial radio.
- Emap felt that new local and national multiplexes would cement interest in DAB, and in particular that a new national multiplex would provide additional listener choice and may lead to the development of new multimedia applications.
- Virgin Radio argued that local multiplexes would enable the majority of listeners to hear the majority of existing local radio services, while a new national multiplex would give digital services currently available on other platforms (including Virgin’s own services) a route to national mobile reception, which is crucial for development.
- UBC felt that, where possible, spectrum should be allocated to allow existing and future local analogue services to have the opportunity to migrate to digital platforms where there was currently no coverage. It also considered, though, that a new national multiplex would add momentum to the uptake of digital radio, contribute to competition, create opportunities for audio, video and data innovation to extend consumer choice and diversity, and would extend the range of services.
- Channel 4, the majority shareholder in national DAB station Oneword, supported the proposal as it felt it would “broadly match analogue radio’s local coverage while driving choice and innovation in national services” all of which it felt were needed to drive set penetration for the benefit of all existing services.

3.7 Some of the smaller radio groups and independent radio stations also supported the proposals:

- Day One Radio felt that the proposal would provide a general opportunity for greater programme choice and expressed interest in providing a national radio service.
- The Radio Pembrokeshire Group felt that listeners would want to hear the most popular local services, while the provision of distinctive national services would complement local services.

3.8 Other organisations also broadly supported the proposals:

- The BBC said that it welcomed “Ofcom’s restated commitment to DAB and the proposed release of three blocks of spectrum for local radio multiplexes and one block for a national multiplex. We recognise the progress towards an end goal of digital switchover that this extra DAB spectrum represents; Ofcom’s position on this issue and its acceptance of the radio industry’s advocacy of a Broadcasting Act licensing regime is warmly received by the BBC. We broadly welcome the proposed approach on new local radio multiplexes and look forward to working with Ofcom on its detailed implementation.” However, the BBC was also concerned by its lack of guaranteed access to any new national spectrum, which it considered was desirable to allow it to provide data services and increased bit-rates for its existing services.
- BT, which will operate the wholesale mobile TV service using the data capacity on the existing Digital One national DAB multiplex, agreed that the policy to use spectrum to create further national and local multiplexes for DAB met the demand of users and that the proposals would allow more services, create more consumer choice and stimulate demand.

- 3.9 The two transmission providers that responded both supported the proposals.
- Arqiva supported additional local spectrum as it “will allow for a significant expansion of services into areas where currently no local services are available”, and the proposal for any new national multiplex to be awarded under the Broadcasting Act (or a Wireless Telegraphy Act with conditions) as this approach would address the concern “that spectrum could otherwise be used for purposes unrelated to the broadcast radio business”.
  - National Grid Wireless said that “the proposed balance of new local and national services should allow both coverage and breadth of services to reach a level capable of sustaining a successful, UK-wide DAB consumer market”.
- 3.10 Some respondents supported the proposals as they saw opportunities to provide new digital services:
- The Christian Broadcasting Council and Premier Christian Radio both supported the proposal as they felt it would create local or national opportunities for Christian broadcasters.
  - The Highways Agency felt that new local multiplexes would create more opportunities to broadcast localised spoken traffic information, while a national multiplex would allow the Agency to negotiate for a further national service including spoken information and multimedia applications.
  - The National Campaign for Children’s Radio said that it considers “the proposals for VHF band III to be allocated for local and national T-DAB services are fair and we sincerely hope that Ofcom will use its power to ensure that an equitable amount of the valuable public estate goes to serve children”.
  - Diamond Broadcasting felt it was sensible to fill existing gaps with local multiplexes and to broaden choice with the national multiplex. The company expressed interest in providing national services.
- 3.11 Although a number of respondents raised specific issues on the proposals set out in the consultation document (see below), with the exception of Digital One, the licensee of the current national commercial multiplex and GCap Media (owning a 63% shareholding in Digital One), there was little disagreement that Ofcom’s proposals represented the optimal use of the spectrum.

### Specific issues raised in relation to Ofcom’s proposals

- 3.12 Digital One as the holder of the current national commercial multiplex licence (and GCap Media) has submitted that the proposed award of a second national multiplex licence is not a path open to Ofcom in law on the basis that Digital One “would hold the “first and only” or “one and only” such licence and Ofcom has previously concluded that it is not precluded in law from awarding a second national commercial multiplex licence.<sup>1</sup> Digital One has also raised a number of issues relating to Ofcom’s consideration of the options, adequacy of Ofcom’s impact assessment, Ofcom’s consideration of evidence and specifically, Ofcom’s consideration of the impact of the proposals on its business and that of other stakeholders. Each of the issues raised by Digital One and GCap are dealt with in detail in the next section.

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<sup>1</sup> [redacted for confidentiality reasons]

- 3.13 In addition, one other respondent, Passion for the Planet, a service provider on local multiplexes, felt that a second national multiplex would have a disproportionate impact on existing digital only stations (particularly advertising revenue), and would decrease listener choice and station quality.
- 3.14 Although the majority of respondents welcomed the proposal for additional spectrum to be made available for local multiplexes and the resulting opportunity for many existing local analogue stations potentially to gain carriage on the DAB platform, there were a number of concerns raised about the possible implications.
- 3.15 A number of respondents (including Forward Media, GCap Media, Digital One, Manx Radio and a confidential respondent) were concerned about the implications of the proposals for existing smaller stations. CRCA expressed the view that smaller analogue stations should not be consigned to what it described as a less important digital technology, and felt that there should be tax breaks or funding to help smaller stations migrate to the digital platform. Forward Media felt that Ofcom should consider licensing much smaller DAB multiplexes than have been proposed hitherto, so as to accommodate what it termed the digitally “homeless” local stations. GCap Media considered that not allowing all existing and future analogue stations to transfer to digital would mean that consumers could not listen to their favourite stations or programmes on digital, and that this would have a negative commercial impact on the stations. A confidential respondent felt that any proposal that denied potentially up to 90 services a route to the consumer needed more consideration, while Manx Radio felt that the future of DAB would be jeopardised unless all local stations could be provided for within the DAB spectrum.
- 3.16 On the other hand, a concern was also raised that not all of the multiplexes may be financially viable; for example a confidential respondent said that the economics of local multiplexes could mean that “white spaces” could occur anyway and that therefore more of the available spectrum should be allocated to national multiplexes. In stakeholder meetings around the country, some of the smaller groups and stations also raised the concern that they could not afford to go digital, even if the cost of doing so was much lower than that on existing multiplexes.
- 3.17 Some respondents, particularly companies which own smaller analogue radio stations such as Forward Media and a confidential respondent, argued that technologies such as DRM, which had been proposed as possible alternatives to DAB as a means of facilitating digital migration for some existing analogue stations, were as yet unproven and receivers were not yet available.
- 3.18 Some respondents (Nokia, the BBC, a confidential respondent and Digital One) were concerned about the process that had been followed, particularly the relatively short four week final consultation period. Digital One, in particular, felt that it had not been given sufficient time to consider all of the issues and as a result had not focused on issues connected to local and regional multiplexes. In addition Digital One expressed the view that the consultation was not properly transparent and accountable on the basis that Ofcom had not provided further information in a timely manner, and that the question asked in the consultation was not designed to engage stakeholders.
- 3.19 Some respondents (for example Arqiva and Channel 4) urged Ofcom to consider bringing forward the proposed licensing timetable where possible. However, subsequent discussions with some radio groups (particularly those with smaller stations) have revealed a concern about the timing of the launch of local multiplexes, and the financial ability of some stations to participate.

- 3.20 Some respondents mentioned the forthcoming RRC as an opportunity to secure better coverage and more robust reception for DAB multiplexes. For example, CRCA encouraged Ofcom to plan implementation with “ease of reception and sufficiently high powered transmission as important priorities”, while National Grid Wireless wanted Ofcom to try in particular to secure “full nationwide coverage for the proposed third national multiplex including coastal areas”.
- 3.21 All of the issues described above are considered in full in the next section.

## Section 4

# Consideration of issues raised

- 4.1 As can be seen from the previous section, respondents to the consultation raised a number of issues. These are addressed below. See also Annex 2 which summarises the issues raised by respondents and Ofcom’s response to those issues.
- 4.2 Specifically, Digital One, the owner of the current national commercial multiplex and GCap Media, raised a considerable number of issues focusing in particular on the proposal to award a further national commercial multiplex licence. These are considered below under the following headings: consideration of the options; adequacy of the impact assessment; use of evidence to support the proposals; and impact of proposals on existing multiplex licensees and service providers.
- 4.3 Digital One also submitted two reports by NERA Economic Consulting (NERA) prepared on its behalf. One of the reports criticises Ofcom’s consultation document as an impact assessment, including in relation to Ofcom’s consideration of the various options and the impact of the proposals on existing licensees and service providers. The other NERA report comments on an earlier report prepared by economic consultants Analysys (see paragraphs 4.24 to 4.28 below).

## Consideration of options for use of the spectrum

- 4.4 NERA criticises Ofcom in its report on the impact assessment on the basis that Ofcom “has not identified, addressed or evaluated all allocation options”, and it suggests that “examples of additional options would include varying the time at which new spectrum would be released or allocated to different uses”.
- 4.5 Ofcom does not accept this criticism. Throughout the consultation process on the allocation of the spectrum in VHF Band III, sub-band 3, Ofcom has considered a wide range of different allocation options. Ofcom is satisfied that it has considered all options that are relevant to the decision.
- 4.6 With regard to NERA’s point that Ofcom should consider varying the time for releasing the spectrum, this matter was considered at paragraph 3.12 of the consultation document. This stated that it will not usually be optimal to delay making spectrum available, as this would result in spectrum remaining unused when it could be utilised to generate economic or other benefits. Spectrum is a major asset to the UK and it will not usually be optimal to keep it unused, especially when there is market interest in seeking access to the spectrum. The consultation document set out (in particular, in section 6) that there was evidence available to Ofcom of substantial demand for access to the spectrum, and this is further supported by the responses received to the consultation. In this context Ofcom noted in the case of VHF Band III, sub-band 3 keeping the spectrum unused would prevent its use for broadcasting services for which there was clear demand. Ofcom considers that the issue of the timing of release of the spectrum has, therefore, been addressed.
- 4.7 With regard to the option of allocating the spectrum for different uses (i.e. other than DAB), the 2003 consultation carried out by the Radiocommunications Agency and the Radio Authority considered a number of different potential uses of the available spectrum. This was followed by the report undertaken for Ofcom by Analysys,

DotEcon and Mason<sup>2</sup> (“ADM”), which also considered a variety of different potential uses of the available spectrum. The conclusion that Ofcom drew from its consideration of that report for the purposes of the consultation document published in October was that the spectrum should be allocated for DAB compatible use (see paragraphs 6.11-6.14 of the consultation document). There was, moreover, a discussion at some length in the consultation document published in October (see sections 4 and 6 in particular) of the principal policy options facing Ofcom in relation to use of the spectrum. In particular, the document discussed a range of options of intervening to secure particular broadcasting policy objectives in relation to use of spectrum, or alternatively allowing flexibility for the market to determine spectrum use. Ofcom therefore considers that the alternative options for its policy towards use of the spectrum have been fully considered.

- 4.8 One respondent proposed an alternative option for the allocation of spectrum. This respondent, who wishes to remain confidential, suggested that most of the capacity proposed for local multiplexes should instead be used for more national and large metropolitan/regional multiplexes, largely on the basis that the latter are likely to be more commercially viable than the former.
- 4.9 Ofcom accepts that some of the proposed local radio multiplexes may not be commercially viable for some time. The reason for the proposed allocation of three blocks of the spectrum to local digital multiplexes was considered in the consultation document. This is because each of these three blocks is required in order to facilitate the provision of local commercial radio services on the DAB platform in areas where currently there are none, but where they are likely to be viable, and to facilitate the provision of all of the BBC’s local and nations’ services on the DAB platform, while achieving an appropriate level of geographical granularity. This continues to be Ofcom’s view. In the consultation document at paragraph 6.139, Ofcom left open the question as to whether some of the smallest areas in terms of population would ever be commercially viable for local multiplex. Ofcom is consulting separately on this question today.

### **Adequacy of impact assessment**

- 4.10 The NERA report submitted by Digital One also considered the extent to which Ofcom’s consultation document constituted an impact assessment under section 7 of the Communications Act 2003. The report focused on economic aspects of the impact assessment but did not deal with issues of technical feasibility.
- 4.11 In summary, NERA submitted that Ofcom has not placed sufficient weight on the relative economic value of different policy options as its proposals are based on achieving public policy outcomes. Moreover NERA argues that Ofcom has not sufficiently considered the impact of its proposals on existing stakeholders and nor has it considered the signals, provided from its proposals, to future investors.
- 4.12 Ofcom disagrees with NERA’s report and considers that the consultation document does constitute an appropriate impact assessment as required for the purposes of section 7 of the Communications Act. Ofcom also considers that the impact assessment is consistent with Ofcom’s guidance on this matter. Ofcom has addressed the detailed points made by NERA in its report at Annex 2 of this

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<sup>2</sup> “Assessment of options for allocating available spectrum within VHF Band II (174–230MHz) and L-Band (1452–1492MHz)”, Analysys, DotEcon and Mason, 3 September 2004 (amended 22 November 2004).

statement but in summary, Ofcom is satisfied that the full range of policy options relevant to the use of this spectrum has been considered in the various different public consultations related to the allocation of the available spectrum, including different potential uses of the spectrum and delaying release of the spectrum; as has the impact on various stakeholders that may arise from Ofcom's proposals, including the potential impact on Digital One, various multiplex operators and existing stations.

### **Use of evidence to support proposals**

- 4.13 Digital One and GCap Media criticise the conclusions Ofcom draws from the audience research into the consumer demand for new services and argues that Ofcom marginalises both the consumer research carried out on behalf of Ofcom and that undertaken by Digital One; and claims that Ofcom has placed an over-reliance on “the fact that two radio companies/ consortia might be prepared to bid for a second national commercial multiplex licence”.
- 4.14 Specifically, Digital One argues that “Ofcom fails to give proper regard to the results of the market research which directly reflects the voices of consumers. Ofcom does not even comment on the implications of the fact that two separately briefed pieces of research, carried out by different firms at different times, reached similar conclusions (which might usually be taken as adding to the credibility of the findings). Instead, reliance is placed on the self-motivated industry views of just two potential consortia who might be interested in applying for a second commercial multiplex. As Digital One has pointed out in earlier submissions, these are companies which, despite invitations, declined to take the initial risk and chose not to apply for the “first and only” national commercial multiplex when it was advertised”
- 4.15 Ofcom does not accept the criticisms that have been made by Digital One and GCap Media. For the reasons set out in the consultation document and the reasons set out below, Ofcom considers it has placed an appropriate weight on both the consumer survey evidence available to it and the evidence of demand for an additional national multiplex from potential operators and service providers.

### **Consumer survey and industry demand**

- 4.16 As set out in the consultation document (paragraph 6.56) in relation to the consumer survey undertaken on behalf of Ofcom there was no widespread agreement among respondents as to whether a wider choice of commercial stations would be appealing to them – the responses to this question were mixed. The results regarding the increased likelihood of purchasing a DAB set, based on extra stations compared to the current line-up, indicate in very general terms that the more stations that are available, the more people say they are interested in buying a DAB digital radio. However, the difference in increased likelihood to purchase a DAB set when offered 8 or 16 additional national stations was not statistically significant.
- 4.17 Ofcom stated that consumer research of this type can be open to question and therefore needs to be treated with caution. Ofcom continues to hold this view, in relation to both the consumer research commissioned by Ofcom and that commissioned by Digital One.
- 4.18 There are a number of reasons for this which were set out in the consultation document, and having taken into account Digital One's comments, Ofcom continues to consider them be valid. Firstly, listeners may find it difficult to have a strong opinion about something they have not experienced. Secondly, it is not possible to know which stations would be offered on a new multiplex and therefore a number of



assumptions have to be made in the questions asked. Thirdly, it is not possible to take account of any additional marketing that a new multiplex operator and new stations would bring to the market, and how this might affect consumers' behaviour.

- 4.19 It is worth also noting that, in the context of considering future consumer demand for developing technologies/products, Ofcom considered in the consultation document that it was also instructive to consider how other new technologies have been perceived before deployment, and how they have developed subsequently.
- 4.20 Ofcom therefore continues to hold the view that the consumer survey evidence is inconclusive, and that it needs to be considered alongside other relevant evidence including evidence available about demand for access to spectrum for an additional national multiplex, the known features of spectrum planning for national as against local use, and the evidence that is available about the benefits of other options for use of the spectrum.
- 4.21 Ofcom rejects the criticisms of Digital One that Ofcom placed over-reliance upon the level of demand from potential applicants for additional national multiplex capacity.
- 4.22 As was noted in paragraph 6.61 of the consultation document, Ofcom considers that the evidence from representations by companies in the radio industry “is strongly suggestive of significant demand for additional spectrum for national radio services, and that, for the reasons discussed, this can be regarded as a good indicator of the potential for the assignment of spectrum for national sound services to be used effectively to provide additional services to listeners.”
- 4.23 Ofcom has now received indications from three companies/consortia that wish to apply for a new national multiplex and from various companies that wish to offer radio services on a new national multiplex – several of these wishing to provide more than one radio service. Ofcom considers that these are persuasive as indications of keen interest in competing for and operating a further national commercial multiplex, and/or operating services on that multiplex.

#### **ADM report**

- 4.24 Following the 2003 consultation, Ofcom commissioned Analysys, DotEcon and Mason Communications (ADM) to assess the relevant economic benefits of various potential alternative uses for the spectrum in VHF Band III. The report also assessed the technical limitations on each alternative use arising from agreements on co-ordination of interference with neighbouring countries to the UK and how an assignment process could allow selection between alternative uses to be made.
- 4.25 Digital One has sought clarification as to the extent to which Ofcom has relied on the ADM report in coming to its proposals and which parts of the ADM report Ofcom regards as valid.
- 4.26 Ofcom considers that the ADM report is relevant to its consideration of the issues in the consultation document in two principal respects.
- 4.27 First, paragraphs 6.7 to 6.14 of the consultation document set out a summary of the analysis in the ADM report that is relevant to the minimum technical parameters that need to be determined in order to release the VHF Band III spectrum for use. The conclusion that Ofcom draws from this analysis, and developments since the ADM report (as set out in those paragraphs), is that the available spectrum should be made available to a technical configuration that is compatible with DAB.

4.28 Second, Ofcom takes the ADM report into account in considering the opportunity costs of intervening to reserve the spectrum to secure particular broadcasting policy objectives. This issue is discussed in paragraphs 6.94-6.110 of the consultation document, and includes a discussion of the wide range of alternative uses of the spectrum that would be possible were Ofcom not to require its use for sound broadcasting.

### Impact of proposals on existing multiplex licensees and service providers

4.29 Three respondents (Digital One, GCap Media and Passion for the Planet) expressed the view that Ofcom’s proposals did not properly consider the impact on existing multiplex licensees and digital sound programme service providers, and that the allocation of spectrum for a second national radio multiplex may damage DAB. These issues are addressed in the following paragraphs.

### Impact on Digital One’s business

4.30 In its report submitted on behalf of Digital One as part of Digital One’s response to the consultation, NERA criticises Ofcom for not giving sufficient consideration to the effect of the proposals on Digital One’s business. In the consultation Ofcom set out its analysis of the impact of a second national commercial multiplex on Digital One’s business.

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4.32 Paragraphs 4.30 (in part) to 4.43 have been redacted for confidentiality reasons,

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4.44 Digital One also comments that Ofcom has failed to take adequate account of the adverse effect that its proposals would have on other local and regional multiplex operators. The potential effects on local and regional multiplex operators were in fact considered in paragraphs 6.167-6.170 of the consultation document. Ofcom has not received any evidence in response to the consultation to suggest that its consideration of this issue is incorrect, nor have any operators of local or regional

multiplexes (other than GCap Media) raised this as an issue in response to the consultation. Ofcom therefore considers that, while there may be some individual stations currently being provided on local multiplexes that might wish to switch to a further national multiplex, the risk is not so severe as to be likely materially to damage the existing local multiplexes.

- 4.45 As a more general matter, Ofcom considers that it is beneficial for the operators of individual radio services to have a choice about the routes that they use to access listeners, and whether this is via local, regional or national multiplexes, and that such a choice is likely to promote competition. Generally, Ofcom does not consider that it has a duty to protect the interests of operators of existing local or regional multiplex or of the existing national commercial multiplex.
- 4.46 Digital One further argues that a second national multiplex would lead to a reduction in activities to secure continuing technical innovation in DAB, citing a possible delay in BT's investment in rolling out transmitters across the UK as a result of the possibility of a second national multiplex. However, no detailed evidence is provided in support of this claim. In fact, as we note elsewhere, BT is supportive of the award of a second national multiplex, arguing that it "will allow more services to be provided which creates more choice for consumers and is therefore likely to stimulate the demand for DAB".

### Implications of proposals for digital prospects of smaller analogue stations

- 4.47 Some respondents to the consultation, including Digital One, GCap Media, Forward Media, a confidential respondent and Manx Radio, argued that spectrum should be allocated to provide a DAB digital migration path for all existing analogue stations.
- 4.48 In paragraph 6.21 of the consultation document, Ofcom set out its policy for local digital radio: "Ofcom considers that extending the availability of local digital radio services to areas that are presently not served by local digital radio services is an important policy objective. This is because securing access to local digital radio services in areas that are presently un-served would reduce geographical inequities in access to services, and promote greater variety and choice in the relevant areas. This objective flows from Ofcom's statutory duty to secure the availability throughout the United Kingdom of a wide range of radio services which are of high quality and calculated to appeal to a variety of tastes and interests. Extending the availability of local multiplexes to areas that do not presently receive such coverage will also facilitate the migration of all of the BBC's local and nations services to the T-DAB platform, as provided for by the Broadcasting Act 1996."
- 4.49 Ofcom has previously stated that it does not, at this stage, propose a digital switch-over plan for radio. Ofcom has also pointed out that no existing analogue station has an automatic right to digital broadcasting, whether on DAB or any other digital platform.
- 4.50 It is also important to understand that the geographical pattern of DAB multiplexes cannot match existing analogue transmission patterns. This is true both for technical and economic reasons. It reflects the finite nature of the spectrum available for broadcasting, and the fact that DAB is, by its nature, based upon multiplexes, which can carry a large number of services. Traditional analogue broadcasting is by contrast based on separate transmission arrangements for each radio station – the fragmented geography and distribution patterns allowing each its own coverage area. DAB is therefore less suited to the carriage of smaller local commercial and community stations, each of which has its own unique editorial coverage area. Ofcom

expects these fundamental technical and economic constraints in relation to the deployment of DAB to remain in existence, at least for some years.

- 4.51 Despite the fact that Ofcom is not proposing digital switch-over in radio at this stage, Ofcom has nevertheless tried to provide the opportunity for as many existing analogue stations as possible to broadcast on DAB. Ofcom's proposals mean that around 205 existing analogue commercial local radio stations, representing approximately 95% of existing commercial radio listening, should have the opportunity to broadcast digitally using DAB. This is only an estimate, as it is impossible to predict which stations will take advantage of this opportunity: a number of stations in existing DAB areas have decided not to go onto DAB, even though there is room on the relevant local multiplex. It is also not clear that all of the local multiplex areas identified by Ofcom for future licensing will in fact prove to be commercially viable.
- 4.52 This would leave around 90 stations which would not have the opportunity to be carried on a local DAB multiplex. These stations are mainly around the fringes of metropolitan areas, which already have a local multiplex with a larger coverage area, but where an additional small local multiplex would not appear to be commercially viable.
- 4.53 If the fourth block of spectrum were used to provide additional local multiplexes, rather than a further national multiplex, only a small proportion of the 90 stations would be covered by the additional local multiplexes, given the constraints on use of the spectrum in terms of frequency re-use. Ofcom estimates that approximately 20-30 of the 90 stations might be covered by a local multiplex as a result. However, many of these multiplexes are likely to have limited coverage areas or addressable markets, and may not be viable as result. Ofcom does not consider that an approach on these lines would represent an optimal use of spectrum in the interests of citizens and consumers.
- 4.54 Ofcom will continue to work with the industry to identify further opportunities for digital migration (such as DRM or the internet) for all existing stations, though there can be no guarantees that a migration path will be found that matches the existing industry structure.
- 4.55 One technology that may be relevant in this context is DRM which does not use a multiplex system and can therefore be more closely tailored to the area served by individual existing stations. However, DRM in medium wave currently only offers a mono signal of approximately FM quality (albeit digital) and few of the required medium wave frequencies are currently available in the UK. DRM in VHF Band II (currently used for FM) should offer significant benefits over existing FM signals, in terms of quality and data capacity, but this technology is still under development.
- 4.56 In the meantime, Ofcom notes that it is technically possible for radio manufacturers to produce radio receivers that can receive DAB (on VHF Band III and L Band, using either MPEG 2 or AAC coding), DRM (on short, medium and long-waves) and FM (using RDS) signals. Some or all of these can be combined into a single menu of available stations, such that the listener is not aware of the technology used to deliver the signal. Indeed, Ofcom notes that such receivers are about to be launched into the UK market.
- 4.57 Such receivers can offer real consumer benefits and, properly marketed, could help digital radio to reach mass market take-up. While this solution does not offer smaller stations all the benefits of being broadcast digitally, it does at least answer one of

their major fears – that listeners will not bother tuning back to FM when they have DAB sets. There will be no need for the listener to “switch back” to FM as their receiver will do it for them, without them being aware.

- 4.58 In the accompanying consultation document, *The Future Licensing of DAB Digital Radio*, Ofcom set out its plans for a major project next year to consider these questions in more detail.

### The proposed licensing regime

- 4.59 The majority of respondents who commented on this issue supported Ofcom’s proposal to license all of the planned new multiplexes (national and local) under the terms of the Broadcasting Act and the Wireless Telegraphy Act, rather than under the terms of the Wireless Telegraphy Act alone. Channel 4 felt that the Broadcasting Act would help “to maximise radio’s public value and market diversity” to the benefit of consumer and citizens. Chrysalis felt that using the Broadcasting Act and having complementary services was important to broaden choice for all listeners. GMG wanted a Broadcasting Act national multiplex to ensure that all multiplex licensees had the same regulatory restrictions. CRCA “supported the advertisement of all DAB multiplex licences under the Broadcasting rather than the Wireless Telegraphy Act”. A confidential respondent said that using the Broadcasting Act would help ensure the orderly, cohesive and structured development of DAB in the UK which it felt was key to the marketing of the concept and the continuing conversion of the greater populace to the benefits of DAB.
- 4.60 However some respondents commented that licensing the national multiplex under the Wireless Telegraphy Act alone could target policy objectives better than a Broadcasting Act plus Wireless Telegraphy Act approach. Digital One felt that the Broadcasting Act framework would limit Ofcom’s ability to secure its stated desired outcomes, and considered that the approach proposed would not guarantee that the output of existing national digital sound programme services would be considered (and if they are considered that Ofcom will attach any importance to them). Digital One also argued that if Ofcom was able to license spectrum for a national multiplex at all, the best way would be under a Wireless Telegraphy Act licence alone (with no pre-conditions concerning ownership). One confidential respondent considered that if Ofcom’s objectives could be secured using a Wireless Telegraphy Act licence only, then it should do so as it offered flexibility, licensing transparency and a targeted, consistent and proportionate level of intervention.
- 4.61 Another confidential respondent pointed out that a Wireless Telegraphy Act licence with conditions for the national multiplex would run counter to “Ofcom’s service neutral and Cave Review commitments to minimise the conditions in WTA licences”.
- 4.62 In addition some respondents had concerns about the potential for a distortion of competition arising from the use of data capacity following licensing under the Broadcasting Act. This issue is addressed at paragraphs 4.66 to 4.74 below.
- 4.63 Ofcom has considered the responses to this consultation on use of the Broadcasting Act plus Wireless Telegraphy Act, or use of the Wireless Telegraphy Act alone, in relation to the licensing of the national multiplex. Ofcom does not agree with the respondents who argued that it would be more difficult to achieve Ofcom’s policy objectives using the former route. Indeed Ofcom considers that it would be a complex and time-consuming task to devise a Wireless Telegraphy Act licence that (taken on its own) could adequately secure the broadcasting policy objectives that Ofcom has identified as relevant. The alternative of Broadcasting Act plus Wireless Telegraphy

Act is, by contrast, a well-established route to licensing terrestrial broadcasting activities.

- 4.64 Ofcom also agrees that the general background of reform to spectrum policy is relevant. In other spectrum award processes, Ofcom has sought to keep non-spectrum related licence conditions to a minimum. Licensing the national multiplex under the Wireless Telegraphy Act only, while seeking to achieve certain broadcasting policy objectives, would require the creation of a *sui generis* Wireless Telegraphy Act licence.
- 4.65 Ofcom therefore remains of the view that on balance of advantage the further national multiplex should be licensed under the Broadcasting Act and Wireless Telegraphy Act. A discussion of the related issue of use of capacity for data services is below.

### **Ability to use a percentage of capacity on radio multiplexes for data services**

- 4.66 Under the Broadcasting Act licensing regime, up to 20% of the capacity on a digital radio multiplex may be used for non-programme related services, including data and multimedia services.
- 4.67 Some respondents argued that licensing the new multiplexes under the Broadcasting Act regime could potentially have a distortive effect on competition, given that other spectrum which can be used for radio and multimedia services has been (e.g. 3G) and is proposed to be (e.g. L-Band) allocated via auction.
- 4.68 A confidential respondent argued that “the percentage of digital capacity rule creates an unacceptable risk of competitive distortion if the winners of the multiplexes are allowed to compete in other markets on what would essentially be an uneven playing field.” The respondent goes on to argue that “the current and future usage of 20% of DAB capacity creates a risk of competitive distortion and we request that Ofcom ensures that competition is fair”.
- 4.69 Ofcom agrees that any potential effects on competition need to be taken into account in deciding on the appropriate mechanism for releasing this spectrum to the market. However, Ofcom does not consider that the assignment of spectrum for use for data services by way of licensing under the Broadcasting Act will necessarily lead to a distortion of competition, as suggested by the respondents. It is clear that the relevant UK and European law allows for spectrum to be assigned either by way of auction or by way of beauty contest, and the regulator is given some discretion as to choice of assignment method depending on the circumstances of the case. Ofcom considers that it would be wrong to conclude that to assign spectrum that may be used for similar purposes by different methods would, by definition, be discriminatory or distortive of competition.
- 4.70 In the present case, Ofcom considers that the use of Broadcasting Act as the basis for assignment is justified, and the superior choice for the reasons set out in the consultation document and in this statement. Ofcom also considers that it would be disproportionate, and antithetical to the optimal use of spectrum, to restrict the use of up to 20% of the available capacity for data services, as suggested by some respondents. Ofcom considers that there is good evidence of demand for capacity for this purpose, as reflected in current developments in the market, the various analyses conducted over the past two years, and the various responses to successive consultations.

- 4.71 Ofcom notes three further points in this context. The first is that standard economic theory suggests that any distortions in competition are only likely to be caused by differences in the marginal costs faced by operators rather than by sunk costs such as auction fees (as long as these are fixed in the auction). This supports the view that it does not necessarily distort competition for some spectrum to be awarded by beauty competition whilst other spectrum may be awarded by auction, for an upfront fee, even if both tranches are used to provide services competing in the same market. It is also notable that different auctions can readily result in different prices being paid for competing spectrum, particularly if these take place at different times.
- 4.72 The second point to note is that Ofcom is currently in the process of considering the potential application of administered incentive pricing (AIP) for broadcast spectrum, including the available spectrum in VHF Band III, sub-band 3. If implemented, this would mitigate any distortion that may arise from the proposed allocation mechanism.
- 4.73 Finally, it is also relevant to recognise that the DAB radio multiplex licences contain provisions requiring fair and effective competition. These restrict the ability of multiplex operators to obtain any unfair advantage in the markets in which they operate.
- 4.74 It has also been suggested in response to the consultation that assignment of the spectrum in a way that allows use for data services under the Broadcasting Act, rather than by way of auction, may constitute State Aid. Ofcom does not consider that State Aid issues are likely to be relevant to this matter, though Ofcom will at all times ensure that it acts in conformity with any relevant laws.

### Amount of data capacity on radio multiplexes

- 4.75 The amount of capacity on a radio multiplex licence which may be used for non-programme related services (known as digital additional services) is currently limited to a maximum of 20%. This limit is prescribed in legislation, and can only be changed by the Secretary of State for Culture, Media and Sport.
- 4.76 In *Radio – Preparing for the future (phase 1)* stakeholders were asked for their opinions as to whether this limit should be relaxed. Many respondents wanted the limit raised or removed (although there was no consensus as to what the new limit should be), while others wanted to ensure that the majority of the capacity remained in use for sound radio services
- 4.77 Phase 2 of *Radio – Preparing for the future* stated that Ofcom proposed to recommend to the Secretary of State that, rather than change the percentage limit, a different approach should be adopted, whereby each multiplex should be required to reserve capacity for at least eight stereo services, but that beyond that, multiplex operators should be allowed to use the capacity as they see fit.
- 4.78 In its response to the most recent consultation, Digital One pointed out that eight stereo services would occupy more than 80% of the available capacity (it currently broadcasts six stereo music and two mono services, one of which only broadcasts for 18 hours each day, which together occupy 80% of the total multiplex capacity) and that therefore any such change would reduce the capacity available for data services.
- 4.79 BT, on the other hand, has argued that the data limit should be increased to 40% on all existing and new multiplexes.

4.80 Ofcom has carefully considered the responses on this issue and is currently in discussions with Government on this matter.

### Technical standards and platforms

- 4.81 A number of respondents to the consultation document, Radio Jackie, the Chelmsford Amateur Radio Society, Surrey Electronics and one who wished to remain confidential, argued that the current coding system employed by the DAB Eureka147 MPEG 2 standard is outdated and that new forms of coding, such as AAC, using MPEG 4, could deliver significant benefits in terms of the number of services that can be provided within a given amount of capacity. This new coding system, some argued, could be used for the new multiplexes, which would help to encourage receiver development now.
- 4.82 Such a change in coding would allow for up to twice as many services to be squeezed into a multiplex as the current coding standard. The major drawback with the new coding system is that the vast majority of existing DAB sets, and those currently being manufactured, would not be able to receive services broadcast in the AAC format.
- 4.83 Some respondents argued that any new multiplexes awarded by Ofcom should be able to use the new AAC coding system. If Ofcom were to follow this suggestion and license the new national multiplex for AAC services, this would mean that any services on the new national multiplex would not be able to be received by existing sets, or many of those currently being manufactured. This would:
- not therefore deliver many of the benefits in consumer choice that licensing a new national multiplex is designed to achieve
  - risk creating confusion for consumers, which could seriously damage the market for DAB
  - potentially damage the business prospects for the winner of the new national multiplex
- 4.84 For these reasons, Ofcom would expect the coding standards used by the operator of new multiplexes to be consistent with the coding standards used for existing multiplexes. Ofcom does recognise the potential advantages of further development in coding standards in the longer term. However Ofcom considers that any change in the short term could have a severe adverse effect on the interests of citizens and consumers, and more widely on the development of the market for digital radio services in the UK.
- 4.85 However, Ofcom is aware that some other countries, which currently have no DAB services or where set sales have been minimal, are considering adopting the new standard.
- 4.86 These developments mean that receivers may be developed for the international market which can receive both the existing MPEG 2 services and any new AAC MPEG 4 services (together with DRM, as discussed below). Ofcom would welcome this development and encourages the radio industry to work with manufacturers to develop and market such radios as standard.
- 4.87 Such a development could mean that, a number of years from now, when the vast majority of radios in the market can receive both MPEG 2 and AAC MPEG 4 services, multiplexes in the UK may be able to make use of AAC, thus further



enhancing spectrum efficiency, allowing the provision of additional services to increase listener choice.

- 4.88 Ofcom is not therefore minded to propose any change to the coding standards set out in regulation at present. Ofcom will however keep the matter under review.
- 4.89 Radio Jackie and Surrey Electronics argued that DRM is becoming a world standard, and therefore that capacity should be reserved in VHF Band III for DRM services.
- 4.90 Ofcom believes the development of DRM could offer consumers significant benefits in the future. At present, DRM is capable of being used in the short-wave, medium-wave and long-wave bands, below 30MHz, only. The DRM system is currently being developed to work in VHF Band II (the spectrum currently occupied by FM radio services), but the technical specifications for this development are unlikely to be completed for the next two years. There is therefore no internationally agreed standard for DRM in the VHF bands and so, at this stage, it would not seem to be appropriate to reserve capacity in these bands for DRM. In the future, it may well be that spectrum becomes available in these bands for DRM use; for example, if FM broadcasting ceases as mass take-up of digital technologies means that current FM broadcasts become less attractive.
- 4.91 Ofcom sees no case for reserving spectrum in VHF Band II or Band III for a technology which has not yet been fully developed or tested, when there is demand for an existing, proven technology to be allocated the available spectrum. As noted above, Ofcom stated at paragraph 3.12 of the consultation document that it will not usually be optimal to keep spectrum unused when the market is demanding access to more spectrum. To delay the award of the available spectrum would not appear to be consistent with Ofcom's statutory duty to secure the optimal use of spectrum.

## The BBC

- 4.92 Ofcom is committed to the future of DAB and recognises the important role the BBC has played in developing DAB, in terms of investment in rolling-out the transmitter network, investment in new stations and promoting the platform. Ofcom welcomes and supports the BBC's continued role in developing the platform.
- 4.93 Ofcom has designed the roll-out of further local DAB multiplexes in such a way as to take account of the BBC's desire to make its local and nations stations available on DAB in every part of the UK and has indicated a route open to the BBC to provide local services to those areas where there is no interest from commercial players.
- 4.94 *Radio – Preparing for the future (phase 1)* set out the options open to the BBC as regards access to any new UK-wide spectrum: "As is the case for the local licences, ... the BBC is free (via one of its subsidiaries) to apply for a new national multiplex licence, just as it did for the digital terrestrial television multiplex licences. Ofcom would assess any application by a BBC company using the same criteria against which it would assess any other applicant. Under these proposals, should a BBC company not want or not be awarded a whole national multiplex, the BBC could consider purchasing additional capacity, on the open market, from the holder(s) of any of the local or national multiplex licences, just as it has purchased additional capacity from SDN on digital terrestrial television, to provide some of its digital radio services there."
- 4.95 This would allow the BBC access to further spectrum to improve the sound quality of its existing services and provide new data services, although the granting to the BBC

of additional spectrum would obviously be subject to a Public Value Test, supported by a Market Impact Assessment.

- 4.96 Since the publication of *Radio – Preparing for the future (phase 1)*, Ofcom has changed its proposal for a further national multiplex from a Wireless Telegraphy Act licence only approach (under which the spectrum would be likely to be licensed to the highest bidder) to a Broadcasting Act licence approach so as to ensure that the spectrum is used, for the most part, for radio services. This does not change the options for the BBC as regards the new national multiplex.

### Conduct of consultation process

- 4.97 In its response to the consultation, Digital One said that it was concerned that Ofcom's consultation had not been properly transparent and accountable.
- 4.98 It said that Ofcom had not kept to its own timetable for publishing the next stage after Phase 1 and had failed to keep stakeholders informed about timetable and process changes. It said that Ofcom had failed to respond to specific requests for information about timetable and process.
- 4.99 Digital One also stated that Ofcom had been less than transparent and accountable by not publishing until 19 October 2005 a list of stations which would be "landlocked in analogue", despite being asked for such a list in May 2005.
- 4.100 More specifically, Digital One said that it had offered to provide Ofcom with additional evidence that the costs of broadcasting smaller stations may be misunderstood and overstated. Digital One said that Ofcom had not sought to engage in a discussion on the matter.
- 4.101 Ofcom notes the concerns raised about its consultation process but is satisfied that it has been conducted appropriately and fairly, and in a manner that does not advantage or disadvantage any one party. Ofcom has set out its proposals in full in the consultation document. Stakeholders, including Digital One, have been given every opportunity to fully contribute by commenting on these proposals, both in writing and orally. Digital One has also been invited on a number of occasions to provide Ofcom with any further evidence that it considers could be relevant. Ofcom has carefully considered all such submissions in coming to the decision set out in this document. Ofcom rejects the suggestion that it has not engaged with stakeholders, including Digital One.
- 4.102 Ofcom acknowledges that it has had to extend the original timetable proposed by it for dealing with this matter in light of the number of consultation responses and the need for Ofcom to fully address those responses including obtaining in some instances additional evidence. Ofcom does not consider that stakeholders have been prejudiced by the extension to the timetable required. Ofcom does not accept that it has failed to inform stakeholders about the timing of the decision on spectrum allocation.
- 4.103 Digital One was also concerned that the four week consultation period was too short. Nokia was unclear why a usual consultation period had not been used. The BBC also noted the short timescale for responses. A confidential respondent also noted that they were unable to formulate a full answer to the consultation in the short timeframe available.

- 4.104 Ofcom considers that a four week consultation for this last consultation was sufficient. Ofcom set out in the consultation document at paragraph A1.14 that it considered that a shorter period of four weeks from its standard consultation period was appropriate in this case given that that consultation was the second consultation on the issues.
- 4.105 There was concern from Digital One that the single question asked in the consultation document was not designed to engage stakeholders or convince them that Ofcom was open-minded. Ofcom rejects the implication that the consultation question asked somehow showed that it was not open-minded and confirms that it has taken all responses to the consultation fully into account before reaching its decision.

### **Coverage and signal strengths**

- 4.106 Several respondents made the point that existing DAB signals do not offer robust reception for mobile and portable devices.
- 4.107 DRG, the licence holder for the Greater London III multiplex asked for its coverage to be extended to match that of the other two Greater London multiplex licences. Ofcom notes that the extent of the licensed area of the licence held by DRG is restricted compared to the other two London multiplexes for technical reasons, and the licence was advertised and awarded by the Radio Authority (and accepted by DRG) on this basis.
- 4.108 More generally, Ofcom is currently working with the industry to explore the scope for power increases within the existing international assignments.
- 4.109 In addition, in the RRC negotiations, Ofcom is trying to secure an improvement to the current planning criteria used for DAB which would significantly improve signal robustness to improve indoor reception on mobile and portable devices.
- 4.110 Ofcom will also consider the scope for re-planning existing frequency assignments to improve coverage and reception.

## Section 5

# Conclusion

## Summary

5.1 As set out in the introduction to this statement, the allocation of spectrum in VHF Band III, sub-band 3 has been the subject of a number of previous public consultations. Ofcom has carefully considered all the responses to these consultations and in light of these and on the basis set out below, Ofcom has decided that, subject to the outcome of next year's Regional Radio Conference and the vacating of the spectrum by existing users, four blocks of spectrum in VHF Band III, sub-band 3 will be allocated to DAB digital radio services, one for a national multiplex and three to provide for local multiplexes. These licences will be awarded under the Broadcasting Act 1996.

## Ofcom's duties and functions

- 5.2 Ofcom has a number of statutory duties relevant to the allocation of spectrum in VHF Band III, sub-band 3. These are set out in full in section 2 of the consultation document.
- 5.3 Ofcom's principal duty is to further the interests of citizens in relation to communications matters and to further the interests of consumers in relevant markets, where appropriate by promoting competition. In carrying out this principal duty, Ofcom is required to secure a number of objectives. In relation to this matter, particularly relevant are Ofcom's duty to secure the availability throughout the UK of a wide range of radio services which are of a high quality and calculated to appeal to a variety of tastes and interests; and its duty to secure the optimal use of the spectrum.

## Spectrum policy and radio broadcasting policy

- 5.4 Ofcom has public policy objectives for broadcasting and for spectrum. Ofcom's radio broadcasting public policy objectives and its spectrum public policy objectives are set out in full in the consultation document.
- 5.5 In the case of broadcasting, Ofcom has a number of public policy objectives including to enhance choice, diversity and innovation for consumers at national, regional, local and community levels and to secure citizens' interests through provision of radio designed to meet public purposes.
- 5.6 Ofcom has first to consider whether the market alone would achieve these outcomes. This requires consideration of whether spectrum would not be allocated through the market to broadcasting. It also requires consideration of whether, even if the market would be likely to use the spectrum resource for broadcasting, there is a need to intervene to secure a particular mix of national, regional, local and community stations and programmes to meet the objectives. *Radio – Preparing for the future (phase 1)* discussed the need for regulatory intervention and concluded that there are two possible rationales for intervention. The first is based on consumer considerations and the extent to which the market might fail to deliver certain types of broadcasting that consumers wish to listen to or to have an option to listen to. The second rationale is based on citizenship considerations. There may be an argument

to intervene to correct externalities and consumers' failure to recognise the full value of the services (known as 'merit goods').

- 5.7 Ofcom has a wide measure of discretion in balancing its statutory duties where these conflict. In so doing, Ofcom will take all relevant considerations into account. For example, if the market would be likely to allocate spectrum to a non-broadcasting use, Ofcom would, in deciding whether or not to intervene to reserve the spectrum for broadcasting, balance the loss of economic benefit from the intervention, and in particular the effect on competition and innovation, against the gains from achieving Ofcom's policy objectives related to broadcasting. It would not represent optimal use of the spectrum if the costs of intervention exceeded the gains; nor would it be reasonable or consistent with the regulatory principles under which Ofcom operates, including proportionality.

### Allocation of spectrum in Band III, Sub-band 3

- 5.8 On the basis as set out above, in deciding whether, or to what extent, to intervene in the allocation of VHF Band III, sub-band 3 spectrum, Ofcom has exercised its discretion by fully taking account of the costs and benefits of intervention in the particular circumstances of the case.

### DAB compatible use

- 5.9 On this basis, Ofcom concludes that the spectrum in VHF Band III, sub-band 3 should be allocated for DAB compatible use. In coming to this conclusion, Ofcom has had regard to the consultations referred to in paragraph 2.1 of this statement and the responses received in respect of those consultations.
- 5.10 In this context, Ofcom has also had regard to the report prepared by ADM which assessed the options for allocation of spectrum in VHF Band III, sub-band 3. The results of ADM's analysis were published alongside *Radio – Preparing for the Future (phase 1)* and the responses received on that report together with further relevant developments since the report were considered in the consultation document (see paragraphs 6.7 to 6.14). Responses on the ADM report following the most recent consultation have also been considered at paragraphs 4.24 to 4.28 of this document.

### Policy case for intervention

- 5.11 In deciding how to allocate the spectrum, Ofcom has judged whether there is a case for intervening in order to secure a particular public policy objective. In the consultation document Ofcom said there were a variety of factors it had to take a view on which included:
- the weight to be given to particular broadcasting public policy objectives; this is relevant to the priority to be attached to achieving particular objectives, both as compared to each other, and compared to a policy of non-intervention;
  - the risk that the objective would not be achieved absent the intervention; this is relevant to the proportionality of the intervention; Ofcom would in general expect to intervene only where it is necessary to do so;
  - the size of the opportunity costs that would be imposed by the intervention; this is also relevant to the proportionality of the intervention, and to the requirement for Ofcom to balance its different statutory duties in judging whether or not to intervene, and if so how.

5.12 On this basis, Ofcom concludes as follows:

- A high weight should be attached to the broadcasting policy objective of securing wider access to local digital radio services in areas that are presently not served. In light of its consideration of consultation responses as described in this document, Ofcom remains of the view as proposed at paragraphs 6.20 to 6.30 of the consultation document.
- It is important to ensure that a wide range of radio services is available nationally that can provide breadth of choice and diversity for listeners, and that are accessible in ways that meet listeners' expectations and preferences. The basis for this objective is set out at paragraphs 6.31 to 6.65 of the consultation document and Ofcom's consideration of responses to that consultation.
- Use of the spectrum in VHF Band III sub-band 3 for additional local multiplexes would not be an efficient means of enabling small stations currently broadcasting in analogue to access a digital platform because of the technical and economic character of broadcasting via DAB. Ofcom's proposals on this issue are at paragraphs 6.66 to 6.88 of the consultation document and this remains Ofcom's view in light of consultation responses as set out in this document, in particular at paragraphs 4.47 to 4.58.
- A higher priority should be given to the assignment of spectrum on a national rather than a local basis in terms of providing additional capacity for local areas already served by a DAB multiplex. Ofcom will however consider the possibility of licensing additional local multiplexes in areas where demand for local digital services is high. Ofcom's reasoning for this consists of paragraphs 6.89 to 6.93 of the consultation document in light of its consideration of consultation responses as set out in this document.

5.13 Ofcom has balanced these public policy objectives with the opportunity costs associated with regulatory intervention in this case. Following consideration of Ofcom's policy objectives and the potential opportunity costs of intervening, Ofcom has considered what the appropriate and proportionate degree of intervention is in relation to the release of the spectrum. Ofcom has made its judgement based on the approach it considers provides the best balance between its statutory duties and public policy objectives and the associated opportunity costs of intervening in certain ways.

5.14 Ofcom concludes that this is best addressed by first considering how much spectrum might be required in order to achieve the public policy objective of wider coverage for local digital radio services, then how much spectrum might be required to achieve the public policy objective of securing additional national sound services, then other broadcasting public policy objectives.

### **Further local multiplexes**

5.15 Ofcom has concluded that three blocks of spectrum in VHF Band III, sub-band 3 should be allocated for the award of further local multiplex licences with the aim of filling the gaps in existing local coverage by DAB. Ofcom considers there is significant public interest in securing wider access to local digital radio services in areas that presently do not have coverage from local services on the DAB platform. Approximately 11% of UK households are in areas without local digital radio services on the DAB platform including some sizeable centres of population. Securing access to local digital radio services in areas that are presently not served will promote greater variety and choice for listeners in the relevant areas. In addition, extending the availability of local multiplexes to these areas will also facilitate the migration of

the BBC's local and nations' services to the DAB platform thereby extending access to these services in DAB to listeners not previously served.

**A further national commercial multiplex**

- 5.16 Ofcom has also concluded that one block of spectrum in VHF Band III, sub-band 3 should be allocated for the award of a further national commercial multiplex. Ofcom considers there is significant public interest in ensuring that a wide range of radio services is available nationally that can provide breadth of choice and diversity for listeners on the DAB platform which currently best provides the mobility and portability of digital radio services for consumers. The use of the spectrum for national services will allow more services to be available to a higher proportion of the population than use of the spectrum for local services given the constraints of frequency re-use. Use of the spectrum for national services will therefore serve to extend the choice available to a greater number of listeners.
- 5.17 Ofcom has identified significant demand for further national multiplex capacity. The award of a second national commercial multiplex licence will go towards meeting this demand and thereby help to extend the choice available to listeners over the widest possible coverage area.
- 5.18 The award of a second national commercial multiplex licence will introduce competition in the provision of national multiplex services which will encourage further investment in the DAB platform. This in turn will lead to greater choice for service providers, advertisers and listeners.
- 5.19 The award of further local digital multiplexes together with a second national commercial multiplex fulfil Ofcom's statutory duties – its principal duties to further the interests of citizens and further the interests of consumers where appropriate by promoting competition; its duty to extend the availability throughout the UK of a wide range of radio services which are of a high quality and calculated to appeal to a variety of tastes and interests; its duty to secure the optimal use of spectrum.
- 5.20 ✂-----
- 5.21 Paragraphs 5.20 to 5.26 have been redacted for confidentiality reasons.
- 5.22
- 5.23
- 5.24
- 5.25
- 5.26 -----✂
- 5.27 On the basis set out in this statement, Ofcom has decided that, subject to the outcome of next year's Regional Radio Conference and the vacating of the spectrum by existing users, four blocks of spectrum in VHF Band III, sub-band 3 will be allocated to DAB digital radio services, one for a national multiples and three to provide for local multiplexes. These licences will be awarded under the Broadcasting Act 1996.

5.28 Ofcom is also issuing a consultation today on how it proposes to apply the statutory criteria for awarding these licences under the Broadcasting Act 1996.

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## Annex 1

# Detailed analysis of consultation responses

Issue raised	Comments	Ofcom's Response
<b>Options</b>		
Consideration of the alternatives	<p>Digital One said that there was no proper consideration, or opportunity-cost value, of alternative uses. NERA said that as Ofcom had not looked at likely outcomes of its proposals it could not be sure that its objectives would be achieved. Paul Harman said that there should be two national multiplexes with three local dependent of five blocks of spectrum. A confidential respondent said that options such as more national and large metropolitan/regional DAB multiplexes (rather than local) would better serve the public interest and help to encourage DAB adoption and encourage a strong commercial radio sector. National/larger multiplexes would broaden more choice to more people than local multiplexes</p>	<p>Ofcom is of the view that it has properly considered a wide range of different allocation options including all those relevant to the decision set out in this document, including opportunity costs and impacts on stakeholders. This is explained in this document at section 4.</p> <p>Ofcom considers that the allocation of three blocks of spectrum to complete local coverage, rather than for regional or large metropolitan coverage is the optimal approach in light of its statutory duties.</p>
<b>Impacts</b>		
Inadequate impact assessment generally	<p>A confidential respondent said that Ofcom needed to provide Cost-Benefit Analysis of the Band III proposal to avoid setting precedents elsewhere. Digital One said that the opportunity costs/benefits of alternatives and potential negative impacts not properly examined and that the impact assessment is unconvincing and not properly addressed. It</p>	<p>Ofcom's response to the NERA report is contained in section 4 of this statement and at Annex 2. Ofcom concludes that its consultation document did constitute an impact assessment for the purposes of the Communications Act 2003.</p>

Radio – Licensing Policy for VHF Band III, Sub-band 3

Issue raised	Comments	Ofcom's Response
	<p>commissioned NERA to examine whether Ofcom's consultation document constituted an impact assessment and this report concluded that Ofcom's chosen option and other options had not been fully assessed and evaluated.</p>	
Impact on Digital One	<p>Digital One argued that Ofcom had not given sufficient consideration to the effect on Digital One of Ofcom's proposals. ☒ -- [redacted for confidentiality reasons] -- ☒</p>	<p>Ofcom's position is that, taking into account all the information provided by Digital One, that any effect on Digital One from licensing a further multiplex is not as significant as Digital One suggests. ☒ -- [redacted for confidentiality reasons] -- ☒</p>
Impact on existing local multiplexes	<p>GCap said that services leaving local multiplexes would have a material effect, they disagree with "Ofcom's speculation" that it is unlikely to be in the owners' interest to remove these stations without being able to replace them. Digital One said that there was no economic analysis of impact on local and regional multiplexes.</p>	<p>Ofcom did consider the impact of its proposals on local and on regional multiplex operators in the consultation document at paragraphs 6.167 to 6.170. Ofcom has not received any specific evidence to suggest that its consideration of this issue is incorrect, nor have any operators of local or regional multiplexes (other than GCap Media) raised this as an issue in response to the consultation. Ofcom therefore considers that, while there may be some individual stations currently being provided on local multiplexes that might wish to switch to a further national multiplex, the risk is not so severe as to be likely materially to damage the existing local multiplexes. Furthermore there should be benefits associated with increased choice and competition for the carriage of stations on different multiplexes.</p>
Impact on existing digital services	<p>Fun radio said that Ofcom needed to consider the impact of national services on existing local digital services.</p> <p>Digital One said that there was incomplete analysis of the impact on digital radio stations.</p>	<p>Ofcom has considered the impact on existing digital services both in the consultation document (at paragraphs 6.171 to 6.179) and in this document at A2.25. Ofcom's view is that the allocation of spectrum to a further national multiplex would not have a disproportionate impact upon existing</p>

**Radio – Licensing Policy for VHF Band III, Sub-band 3**

Issue raised	Comments	Ofcom's Response
	<p>Passion for the Planet said a second national multiplex would mean more stations on top of the existing stations so spread advertising revenue more thinly and so stations will close or reduce niche content. More stations when existing services are not viable risks the future of DAB. It would have a disproportionate impact on the existing digital only stations and will ultimately decrease listener choice and station quality. Not clear how Ofcom can predict that the proposals “would not have a disproportionate impact on existing digital-only stations” if Ofcom can’t “predict with any accuracy what the net effect of these developments will be”.</p>	<p>digital-only stations, and that there will be significant benefits to citizens and consumers.</p>
<p>Impact on quasi-national stations</p>	<p>Digital One said that Ofcom should seek binding promises from quasi-national station owners to confirm expectations regarding which stations may move from local to a new national multiplex. Given that some quasi-national stations had at some time or other requested capacity on Digital One, Digital One said Ofcom was unduly optimistic.</p>	<p>Ofcom considered the issue of whether quasi-national stations would withdraw from local multiplexes to seek carriage on any new multiplex in the consultation document at paragraphs 6.166 to 6.170 and has no evidence to suggest that the analysis was unduly optimistic. Ofcom has no power to secure binding promises from station owners as requested.</p>
<p>Impact on PMR, PAMR</p>	<p>Digital One said that there was incomplete analysis of the impact on PMR, PAMR in light of RRC 2006. Digital One said that the paper did not set out which of the five blocks was not available and why it was not available.</p>	<p>Ofcom has considered carefully the wide range of alternative uses for this spectrum. This issue was addressed in sections 5 and 6 of the consultation document, including the consideration of the potential effects of the RRC. Which of the 5 blocks is unavailable will be dependent on the outcome of the RRC. Ofcom does not think it is necessary or desirable to delay resolving the issues addressed in the consultation document pending the RRC as there are significant public benefits in planning for the use of the spectrum that it is likely to be available.</p>

Radio – Licensing Policy for VHF Band III, Sub-band 3

Issue raised	Comments	Ofcom's Response
Full consideration of the costs	Digital One said that Ofcom had not properly considered the costs of the new multiplexes it is considering and whether competition would therefore be sustainable.	<p>Ofcom considers that there is significant evidence of demand for access to national multiplex capacity, including representations from at least three companies or consortia. Ofcom's view is that these are robust expressions of demand which are likely to be predicated on some consideration of the business case for a new national multiplex, taking into account both likely costs and potential revenues.</p> <p>Ofcom is today consulting on the viability of the proposed areas for local multiplex licences and welcomes views on the issue.</p>
Impact on consumers and manufacturers	Digital One said that Ofcom had not considered how its proposals may affect bringing DAB to market and this will have negative impacts on consumers and manufacturers. They also said that Ofcom had not produced evidence to show how consumers will benefit.	Under the Broadcasting Act regime, Ofcom must consider how an award to an applicant of a national multiplex licence would be calculated to promote development of non-satellite digital sound broadcasting in the UK. This includes the extent to which an applicant would promote or assist with the acquisition of digital radio receivers and this will be likely to have a positive effect on manufacturers. In addition, Ofcom set out in the consultation document how it considered its proposals would impact on competition which would be in the interests of consumers and Ofcom considers that this still stands (see section 6.152 to 6.155 of the consultation document).
Transmitter networks	⌘ -- [redacted for confidentiality reasons] -- ⌘	⌘ -- [redacted for confidentiality reasons] -- ⌘

**Radio – Licensing Policy for VHF Band III, Sub-band 3**

<b>Issue raised</b>	<b>Comments</b>	<b>Ofcom's Response</b>
Impact of data portion of the spectrum on mobile TV	Some respondents argued that licensing the new multiplexes under the Broadcasting Act regime could potentially have a distortive effect on competition, given that other spectrum which can be used for radio and multimedia services has been (e.g. 3G) and is proposed to be (e.g. L-Band) allocated via auction.	Ofcom agrees that any potential effects on competition need to be taken into account in deciding on the appropriate mechanism for releasing this spectrum to the market. However, Ofcom does not consider that the assignment of spectrum for use for data services by way of licensing under the Broadcasting Act will necessarily lead to a distortion of competition, as suggested by the respondents. It is clear that the relevant UK and European law allows for spectrum to be assigned either by way of auction or by way of beauty contest, and the regulator is given some discretion as to choice of assignment method depending on the circumstances of the case. Ofcom considers that it would be wrong to conclude that to assign spectrum that may be used for similar purposes by different methods would, by definition, be discriminatory or distortive of competition. This issue is further addressed at section 4 of this document.

**Migration path**

**Radio – Licensing Policy for VHF Band III, Sub-band 3**

<b>Issue raised</b>	<b>Comments</b>	<b>Ofcom's Response</b>
Transfer of all analogue stations to DAB	<p>GCap said that not allowing all analogue stations to transfer to digital would mean that consumers could not listen to their favourite stations or programmes on digital and that would have a negative commercial impact on the stations. Confidential respondents said the proposals excluded local station and any proposal that denied 90 services a route to the consumer needed more consideration. Manx Radio said that the future of DAB would be jeopardised unless all local stations could be provided for within the DAB spectrum. Forward Media said that Ofcom should consider creating much smaller DAB multiplexes than it is at the moment to accommodate the digitally “homeless” local stations. Digital One wanted Ofcom to provide the reach of all “orphaned” stations. It also wanted to contribute to discussions about smaller stations and said it odd that Ofcom is postponing this until the spectrum is allocated</p>	<p>No local commercial analogue radio station has an automatic right to migrate to a digital platform. However Ofcom notes the responses to the consultation and considers that the availability of existing stations on digital platforms is desirable and raises important issues of public policy. Ofcom will continue to work with the industry to identify further opportunities for digital migration as further set out in this document.</p>
Use of ‘heritage’ TSAs for planning	<p>Digital One also wanted to know if the needs of “landlocked” stations would have been met if Ofcom had not used Total Survey Areas (TSAs) of ‘heritage’ stations to plan new local multiplexes</p>	<p>Ofcom considered a range of options when looking at how to plan the new multiplexes including a full replanning of the spectrum (paragraphs 6.115-6.118 and annex D to the consultation document). As a result Ofcom has concluded that planning using the TSAs of heritage stations is the optimal outcome.</p>
Aid for stations to go digital	<p>CRCA said that there should be tax breaks or funding for smaller stations to help them go digital</p>	<p>Tax breaks or funding for smaller stations are an issue for government rather than for Ofcom.</p>

**Use of evidence to support proposals**

Radio – Licensing Policy for VHF Band III, Sub-band 3

Issue raised	Comments	Ofcom's Response
Use of research and evidence of demand	Digital One and GCap Media both criticise the conclusions Ofcom draws from its audience research into the consumer demand for new services and claim that Ofcom marginalises both its own research and that undertaken by Digital One. They also claim that Ofcom has placed an over-reliance on “the fact that two radio companies / consortia might be prepared to bid for a second national commercial multiplex licence”.	Ofcom does not accept the criticisms that have been made by Digital One and GCap Media. For reasons discussed in section 4 of this document, Ofcom considers that there are good reasons not to place undue reliance on the evidence provided by consumer research into the value of services that do not yet exist. Ofcom also considers that it is appropriate to attach weight to the evidence of demand for an additional national multiplex from potential operators and service providers, for the reasons set out in the consultation document, notably that such parties will only be successful in their use of the spectrum if they provide services that are of value to listeners and advertisers (see paragraph 6.41 of the consultation document).
Use of DRDB research	Digital One said that Ofcom was wrong to infer that the DRDB research could say anything about consumer demand for further stations.	Ofcom set out in the consultation document (at paragraph 6.62) that the DRDB research is less likely to be inconclusive than the other types of research discussed in section 6 of the consultation document. Ofcom remains of the view that the consumer research evidence should be seen alongside other sources of evidence that are available in relation to the optimal use of the available spectrum, including industry demand.
New stations leading to take-up.	Digital One referred to Ofcom’s argument that new places for stations to broadcast nationally may be available for stations that do not yet broadcast on DAB. This could contribute to a take up in receivers. Digital One said Ofcom’s hypothesis was not supported by the evidence from its consumer research.	Ofcom has not linked its statement at paragraph 6.173 to the consumer research. The research investigated demand amongst consumers for unspecified new national digital radio services. The statement at 6.173 suggested that listeners to existing digital services on platforms other than DAB might purchase a DAB receiver in order to receive their favourite station on a platform offering mobility.

Radio – Licensing Policy for VHF Band III, Sub-band 3

Issue raised	Comments	Ofcom's Response
Use of the ADM report	Digital One said that it was not clear what reliance Ofcom was placing on the ADM report. Digital One said that Ofcom had not provided enough visibility as to why it concluded that the ADM analysis that the spectrum should be used for DAB compatible use is robust particularly as Ofcom is consulting on possible uses of L-Band including for DAB.	Ofcom explains in this document that the ADM report is relevant to its consideration of the issues in the consultation document in two principal respects. First, paragraphs 6.7 to 6.14 of the consultation document set out a summary of the analysis in the ADM report that is relevant to the minimum technical parameters that need to be determined in order to release the VHF Band III spectrum for use. The conclusion that Ofcom draws from this analysis, and developments since the ADM report, is that the available spectrum should be made available to a technical configuration that is compatible with DAB. Second, Ofcom takes the ADM report into account in considering the opportunity costs of intervening to reserve the spectrum to secure particular broadcasting policy objectives. This issue is discussed in paragraphs 6.94-6.110 of the consultation document, and includes a discussion of the wide range of alternative uses of the spectrum that would be possible were Ofcom not to require its use for sound broadcasting.

**Licensing**

Accelerate licensing	Arqiva said that local licensing timetable should be brought forward where spectrum clearance is not required at RRC 2006. Channel 4 wanted a more aggressive timetable where possible to improve DAB's market position.	The licensing timetable is being consulted on in <i>The Future Licensing of DAB Digital Radio</i> which is being published today.
Beauty parade is unfair	A confidential respondent said a UK-wide licence award based on a beauty parade alone cannot genuinely be fair where applications are broadly similar. Following award, market mechanisms risk undermining confidence in any beauty parade licensing process	In the course of the radio review Ofcom has carefully considered both the Broadcasting Act and the Wireless Telegraphy Act licensing regimes. Ofcom considers that the Broadcasting Act (with its inherent beauty parade) is the most appropriate licensing regime to use in this instance for



**Radio – Licensing Policy for VHF Band III, Sub-band 3**

Issue raised	Comments	Ofcom's Response
		the reasons set out in this document.
Considerations for new national services	Fun Radio wanted Ofcom to consider existing digital services when considering new national services.	How Ofcom proposes to apply the statutory criteria is set out in the consultation <i>The Future Licensing of DAB Digital Radio</i> which is being published today.
Achieve an increase in stations appealing to particular interests	Digital One disputed that stations with formats which appeal to groups with particular interests could go on another national multiplex because the market will migrate to services which are more than just marginally profitable. Ofcom is also wrong to say certain types of format (Rock) are different and this will encourage more variations on this theme rather than encourage new services.	Ofcom remains of the view that some services will only be viable in coverage areas with relatively large populations which might include groups with particular interests sufficient to be attractive to advertisers. Ofcom does not agree its proposals to apply the statutory criteria would undermine this point but is in any event consulting on the issue in <i>The Future Licensing of DAB Digital Radio</i> which is being published today.
85% coverage of a national multiplex	Digital One believe that 85% population coverage is the appropriate minimum should a further national multiplex licence become available	How Ofcom proposes to apply the statutory criteria is set out in the consultation <i>The Future Licensing of DAB Digital Radio</i> which is being published today.

**Ability to use a percentage of capacity on radio multiplexes for data services**

Mobile TV	A confidential respondent thought that the proposals were not a proportionate way to promote digital radio as they also reserve data channels. The proposals are not solely limited to the delivery of digital radio programming, they have spill over effects into the broader mobile TV market (L-Band and Bands III/IV) and directly discriminate against (and compete with) existing 3G services.	Ofcom agrees that any potential effects on competition need to be taken into account in deciding on the appropriate mechanism for releasing this spectrum to the market. However, Ofcom does not consider that the assignment of spectrum for use for data services by way of licensing under the Broadcasting Act will necessarily lead to a distortion of competition, as suggested by the respondents. This issue is addressed above in “impacts” and further in section 4 of this document.
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**Radio – Licensing Policy for VHF Band III, Sub-band 3**

Issue raised	Comments	Ofcom's Response
<b>Amount of data capacity on radio multiplexes</b>		
State aid	A confidential respondent said that the setting of an arbitrary fee level for TV services in Band III compared to market risk through auction in 3G may breach state aid rules. A further confidential respondent said Ofcom was setting a precedent for indirect subsidy	Ofcom does not consider that state aid issues are likely to be relevant to this matter though Ofcom will at all times ensure that it acts in conformity with any relevant laws.
Data limits	National Grid Wireless wanted progressive relaxation of the data limit to allow efficient use. Digital One said that Ofcom's views on the 20% data limit were unclear. Digital One also said that the fact of the 20% data limit issue was being consulted on meant the Ofcom could not make the decision it wanted.	As explained in section 4 of this document, Ofcom has carefully considered the responses on this issue and is currently in discussions with Government on this matter. Ofcom would not delay deciding on the matters considered in the consultation pending a response from the Government as this is likely to lead a delay in benefits to citizens and consumers. Ofcom discusses the reasons why it does not consider delaying making this spectrum available an optimal outcome at section 4 of this document.
<b>Technical standards and platform</b>		
Alternative coding for DAB	A confidential respondent said that the effect of alternative coding techniques should be taken in to account. Radio Jackie and Surrey Electronics disagreed with the proposals as they said that the current version of DAB was outdated. CARS said that there should be provision for upgrades to newer coding standards	For the reasons set out in section 4 of this document, Ofcom is not minded to propose any change to the coding standards set out in regulation at present. Ofcom will however keep the matter under review.
<b>BBC</b>		
BBC services	The BBC said that it currently has insufficient capacity for all	The BBC's position as regards the allocation of spectrum is

**Radio – Licensing Policy for VHF Band III, Sub-band 3**

<b>Issue raised</b>	<b>Comments</b>	<b>Ofcom's Response</b>
	of its services (including data and multimedia), and did not feel that the spectrum allocation process would meet their needs. CARS said that the request for additional BBC spectrum should be addressed	set out in detail at section 4 of this document.
<b>Process</b>		
Short consultation period	Nokia questioned the need for a shorter timetable. The BBC commented on the shorter timescale with a request for further detailed discussions with Ofcom on their response. A confidential respondent felt unable to formulate a full answer in the time frame. Digital One said that they had not been given sufficient time to consider all of the issues.	Ofcom's view is that the four week consultation was justifiable as this was the second consultation on the issues and this was set out at paragraph A1.14 of the consultation document.
Provision of information	Digital One said Ofcom did not provide information as soon as it was available but waited until publication.	Stakeholders have had an opportunity to comment on the evidence through public consultation and their comments have been taken into account fully in coming to the decision as set out in this document.
Engagement with stakeholders	A confidential respondent said that Ofcom had not at engaged with possible providers of new services in spectrum bands previously reserved for broadcasting. Digital One said that Ofcom had not “properly given smaller stations and their consumer listeners an opportunity to participate in this consultation” Digital One said Ofcom showed a lack of communication on changes to the timetable	Ofcom is satisfied that its process has been conducted fairly and that it has properly engaged with stakeholders. Ofcom will also continue to work with industry to identify further opportunities for digital migration.
Factual errors	Digital One and NERA said that there were a number of factual errors that Ofcom had relied on. Digital One said Ofcom was incorrect when it said that Digital One broadcast	Ofcom has considered the areas where there were considered to be factual errors and believes that none of the areas have a material impact on Ofcom's proposals as set

**Radio – Licensing Policy for VHF Band III, Sub-band 3**

Issue raised	Comments	Ofcom's Response
	eight full time stereo services. ✂ -- [redacted for confidentiality reasons] -- ✂	out in the consultation document. Ofcom has noted the response about how many full time stereo services are broadcast by Digital One and is taking this into account in its discussions with Government regarding the data limits on radio multiplex licences. ✂ -- [redacted for confidentiality reasons] -- ✂ Ofcom therefore considers that the factual errors do not have a material impact on its decision.
2003 consultation responses	Digital One wanted to know if the 2003 consultation responses had been taken into account.	The responses to the 2003 consultation have been fully taken into account as set out in the consultation and in this document.
Re-examine issues after RRC	Digital One said that Ofcom should re-examine issues after RRC.	Ofcom has considered carefully the wide range of alternative uses for this spectrum. This issue was addressed in sections 5 and 6 of the consultation document, including the consideration of the potential effects of the RRC. Ofcom does not think it is necessary or desirable to delay resolving the issues addressed in the consultation document pending the RRC as there are significant public benefits in planning for the use of the spectrum that it is likely to be available.
Single question	Digital One said that a single, binary (yes/no) question on complex issues was inappropriate as it does not engage with stakeholders or suggest open minds, it restricts options and the range of discussion	A number of consultation questions regarding the allocation of this spectrum have been asked in the past and Ofcom considered in light of this that a single question was appropriate. Ofcom's consultation was conducted with an open mind and all responses taken into account in coming to the decision as set out in this document.

Radio – Licensing Policy for VHF Band III, Sub-band 3

Issue raised	Comments	Ofcom's Response
<b>Coverage and signal strengths</b>		
Reception	Several respondents made the point that existing DAB signals do not offer robust reception for mobile and portable devices	Ofcom is currently working with the industry to explore the scope for power increases within the existing international assignments. We will also consider the scope for re-planning existing frequency assignments to improve coverage and reception.
} < -- [redacted for confidentiality reasons] -- } <		
<b>Other points</b>		
National service for Wales	A confidential respondent wanted Ofcom to consider allocating a single multiplex to serve all of Wales and that BBC Welsh services, local and national are available across Wales	Ofcom has today set out in detail the list of proposed areas for new local multiplexes for consultation and this is based on areas published in previous consultations. Ofcom welcomes further views on this issue.
Reserve spectrum for children's radio	The National Campaign for Children's Radio wanted Ofcom to ensure that some of the spectrum goes to serve children.	Under the Broadcasting Act licensing regime, Ofcom has no power to secure that a multiplex carries any format but will take a proposed line up of services into account in accordance with the statutory criteria. Ofcom's proposals on how it will apply the statutory criteria are being consulted on in <i>The Future Licensing of DAB Digital Radio</i> which is being published today.
Migration path for Freeview	Paul Harman said that Ofcom should provide a migration path for Freeview radio services to free up space for more	Ofcom considers that carriage of radio on the Freeview platform offers valuable services for listeners which

**Radio – Licensing Policy for VHF Band III, Sub-band 3**

<b>Issue raised</b>	<b>Comments</b>	<b>Ofcom's Response</b>
radio	TV services.	contribute to the widespread availability of radio services and to the further development of the Freeview platform. Ofcom considers that to further restrict the provision of radio on Freeview would not be in the interests of citizen-consumers and would not be a proportionate intervention.
Reflect role of Digital One in DAB development	Digital One wanted to make sure that Ofcom's report to the Secretary of State under s67 of the Broadcasting Act reflected the role Digital One had in promoting the development of DAB.	A report to the Secretary of State was sent to the Secretary by her deadline of 31 October 2004, reporting to her on the specific matters that Ofcom was asked to consider. Ofcom would be happy to discuss any plans for licence renewal with Digital One.
Intention to allow the spectrum to be tradable	Digital One was unclear whether Ofcom intended to allow this spectrum to be tradable, and if so questioned the efficacy of the proposals to secure policy goals	Ofcom has not made any decision in relation to the extension of spectrum trading to the spectrum used for sound broadcasting. However, the consultation document was clear that although the Spectrum Framework Review set out a vision based on market mechanisms, it acknowledged that there are certain areas where trading and liberalisation could not be fully applied. These include broadcasting which is subject to national broadcasting legislation and a number of international agreements and technical constraints.
Delay conclusions until Phase 2 consultation is complete	Digital One said Ofcom should wait till radio strategy concluded as Phase 2 is open to consultation until 11 January 2006.	The Phase 2 Radio Review document concludes on Ofcom's strategic framework for radio. The consultation question addresses a specific operational question relating to format changes which will not affect the conclusions in this document.
The proposals will not ensure a wide range	Radio Jackie said DAB multiplexes cover areas larger than many local FM services, so more local multiplexes will lead to less local material and less diversity of ownership, so	Ofcom has carefully considered what approach to take when considering how additional spectrum could be assigned to achieve a wider coverage of local digital radio services. This

Radio – Licensing Policy for VHF Band III, Sub-band 3

Issue raised	Comments	Ofcom's Response
of services and local provision	Ofcom will not ensure a wide range of services and local provision.	is set out at paragraphs 6.116 to 6.146 of the consultation document. Ofcom is also consulting on the proposed areas in <i>The Future Licensing of DAB Digital Radio</i> being published today.
Additional local multiplexes in existing coverage areas	Radio Pembrokeshire Group said that additional local multiplexes should be made available in urban areas. Michael Cook said that as many further local/regional multiplexes as technically possible should be created with priority given to regional multiplexes	Ofcom proposed in the consultation document that three blocks of VHF Band III, sub-band spectrum should be allocated for the completion of local digital radio coverage. In principle Ofcom considered that these three blocks could be used to support further multiplexes in addition to those required for the completion of local digital radio coverage. Ofcom said that it would consult fully before deciding on how to proceed with this matter and this remains the case.
Departure from general spectrum policy	A confidential respondent said the consultation represents a fundamental change in Ofcom's proposals and a significant departure from its general radio spectrum policy	The consultation document was clear that although the Spectrum Framework Review set out a vision based on market mechanisms, it acknowledged that there are certain areas where trading and liberalisation could not be fully applied. These include broadcasting which is subject to national broadcasting legislation and a number of international agreements and technical constraints.
Spectrum for Northern Ireland	Digital One said that allocating spectrum to Digital One to broadcast the national commercial multiplex in Northern Ireland would help secure Ofcom's section 3 duty.	Ofcom addressed this point at paragraph 6.181 of the consultation document. Ofcom is also today consulting on the future use of spectrum in Northern Ireland in <i>The Future Licensing of DAB Digital Radio</i> .
Sustainable competition	⌘ -- [redacted for confidentiality reasons] -- ⌘	⌘ -- [redacted for confidentiality reasons] -- ⌘

## Annex 2

# Criticism of Ofcom's Impact Assessment

- A2.1 Digital One included, as part of its response to Ofcom's consultation on the allocation of spectrum in VHF Band II sub-band 3, a document<sup>3</sup> prepared by NERA providing comments on Ofcom's impact assessment relating to its proposals. NERA's document examines the extent to which Ofcom's consultation constitutes an impact assessment under section 7 of the Communications Act 2003 and focuses on economic aspects of the impact assessment but does not deal with issues of technical feasibility.
- A2.2 Ofcom disagrees with this response and considers that the consultation document constitutes an impact assessment for the purposes of section 7 of the Communications Act and that the impact assessment is consistent with Ofcom's guidance on this matter. See section 4 in the statement.
- A2.3 NERA, in making its assessment refers to Ofcom's impact assessment guidance<sup>4</sup>, which identifies six main stages of an impact assessment:
- Defining the issue under consideration and identifying the citizen or consumer interest;
  - Defining the policy objective
  - Identifying the options;
  - Identifying the impacts on different types of stakeholder;
  - Identifying any impacts on competition; and
  - Assessing the impacts and choosing the best option.

### Stage 1: Definition of the issue

- A2.4 NERA does not identify any criticisms of Ofcom's approach to this stage.

### Stage 2: Definition of policy objectives

- A2.5 NERA does not identify any criticisms of Ofcom's approach to this stage.

### Stage 3: Identification of options

- A2.6 NERA criticises Ofcom for not identifying, addressing or evaluating all allocation options. NERA suggests that additional options would include varying the time at which new spectrum would be released or allocated to different uses.
- A2.7 Ofcom does not accept this criticism. Throughout the consultation process on the allocation of VHF Band III, Sub-band 3, Ofcom has considered different options for allocating the available spectrum.
- A2.8 On the first specific suggestion from NERA, Ofcom stated at paragraph 3.12 of the consultation document that it will not usually be optimal to keep spectrum unused

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<sup>3</sup> "Critical review of Ofcom's impact assessment of licensing policy for VHF Band III, Sub-band 3, prepared for Digital One", NERA, 15 November 2005.

<sup>4</sup> [http://www.ofcom.org.uk/consult/policy\\_making/guidelines.pdf](http://www.ofcom.org.uk/consult/policy_making/guidelines.pdf)



when the market is demanding access to more spectrum. Moreover, to delay the award of the available spectrum would not appear to be consistent with Ofcom's statutory duty to secure the optimal use of spectrum. Releasing spectrum to the market as soon as practicable will ensure that benefits from releasing available spectrum are realised as soon as possible. Further if Ofcom were to signal that it would be prepared to delay allocation of the available spectrum in response to arguments that more time was needed to recover costs then this could introduce perverse incentives.

- A2.9 On the second specific suggestion, Ofcom (as then the Radiocommunications Agency and the Radio Authority) in the 2003 consultation considered a number of different uses of the available spectrum. This was followed up by the report by Analysys, DotEcon and Mason<sup>5</sup>, which considered a variety of different potential uses of the available spectrum. The conclusion from Ofcom's consideration of that report was that the spectrum should be DAB compatible.

#### **Stage 4: Identification of impacts on stakeholders**

- A2.10 NERA makes a number of criticisms of Ofcom's approach to this stage of the impact assessment, these are dealt with below.

#### **Determination of likely policy outcomes**

- A2.11 NERA makes a number of criticisms under this heading. First NERA criticises Ofcom for not looking at the likely outcome of policy outcomes in sufficient detail, in particular in relation to the financial viability of new entrants.
- A2.12 Second, NERA criticises Ofcom for not making clear how the different licensing options would affect likely outcomes. NERA argues that this may mean that the estimate of benefits given by ADM and Ofcom may be misleading as the licensing framework may limit the amount of spectrum that can be used for different services.
- A2.13 Third, NERA criticises Ofcom for assuming that its proposal, for allocating the fourth available block of spectrum for national use, will result in the securing of national sound services on the DAB platform being achieved. NERA argues that this may not be the case because of insufficient demand to support two national multiplexes.
- A2.14 Ofcom disagrees with NERA's criticisms. For both local and national licences, Ofcom is required to have regard to the extent to which applicants' proposals would be calculated to promote the development of digital sound broadcasting in the UK (otherwise than by satellite), taking into account a number of matters, including the ability of the applicant to establish the proposed service and to maintain it throughout the licence period.
- A2.15 As detailed in the consultation document, Ofcom has assessed both industry and consumer demand and considers that there is evidence of significant demand for access to spectrum assigned on a national basis for digital radio services. The ability of individual applicants to maintain the proposed service would be assessed at the time the licences were awarded. However, given the level of demand

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<sup>5</sup> "Assessment of options for allocating available spectrum within VHF Band II (174–230MHz) and L-Band (1452–1492MHz)", Analysys, DotEcon and Mason, 3 September 2004 (amended 22 November 2004).

indicated, Ofcom considers there is good reason at this stage to believe that a second national commercial multiplex will be successful.

- A2.16 Ofcom notes that the reference to the consultation highlighted by NERA<sup>6</sup> is in relation to ensuring that the potential population covered by a local multiplex is large enough to make the offering of multiplex services within that area viable rather than the new entrant being financially viable. In planning the local multiplex areas, Ofcom has balanced editorial area sensibilities with existing station coverage and commercial viability. However, as Ofcom has noted, some of the smaller local areas may not be financially viable and as such Ofcom is now consulting on individual areas. However, this does not alter the public policy principle set out, which is to provide the opportunity for a local multiplex in every part of the UK.
- A2.17 On the question of the licensing framework and its effect on likely outcomes, as set out in the consultation document, Ofcom assessed the different licensing frameworks after setting out in detail its policy objectives and its consideration of the different options available to achieve these public policy objectives. Ofcom does not consider that its licensing proposals risks not achieving the public policy objectives identified in the consultation document. Ofcom's consideration of these issues were set out in Section 7 of the consultation document.
- A2.18 As with NERA's first criticism above, Ofcom has assessed the extent of industry and consumer demand for the available spectrum and considers that there is evidence of significant demand for access to spectrum assigned on a national basis for digital radio services. This indicates that allocating one block of the available spectrum to national DAB use will achieve the public policy objective of securing national sound services on the DAB platform. Nonetheless, the consultation document did consider the possibility that the market would not be able to support more than one national DAB multiplex operator and concluded that it was not for Ofcom to determine who this operator should be and it was for prospective applicants to judge whether entry could be sustained. Each applicant's ability to sustain the service would then be assessed by Ofcom as part of the licence award process.

#### **Impact on the existing multiplexes**

- A2.19 NERA criticises Ofcom for not giving sufficient consideration of the effect of the proposals on Digital One's business. Each of NERA's criticisms on this issue are dealt with in detail in the statement at paragraphs 4.30 to 4.46.

#### **Impact on listener choice**

- A2.20 NERA criticises Ofcom for not giving sufficient consideration to the likely financial feasibility of entrants to the market and the likelihood that Ofcom's policy will deliver increased choice for listeners.
- A2.21 As noted under "determination of likely policy outcomes" above and in the consultation document, Ofcom has assessed both industry and consumer demand and considers that there is evidence of significant demand for access to spectrum assigned on a national basis for digital radio services. Given the evidence of demand, Ofcom considers that there is good reason to believe that the entrants or

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<sup>6</sup> Paragraph 6.116.

associated benefits will not materialise after allocating the available spectrum as proposed.

**Impact in the longer term**

A2.22 ✂ -----

A2.23 Paragraphs A2.22 to A2-24 have been redacted for confidentiality reasons.

A2.24 ----- ✂

**Other impacts not considered by Ofcom**

A2.25 NERA criticises Ofcom for not analysing or quantifying the impact of varying the timing of the allocation of the available spectrum on existing businesses. NERA further argues that a delay, but with the prospect of future entry, would provide Digital One with the incentive to innovate more and lower its costs so that it would be better placed to compete once a competitor enters the market.

A2.26 In response, as noted above under “Stage 3: identification of options” Ofcom stated at paragraph 3.12 of the consultation document that it will not usually be optimal to keep spectrum unused when the market is demanding access to more spectrum. Moreover, to delay the award of the available spectrum would not appear to be consistent with Ofcom’s statutory duty to secure the optimal use of spectrum. Since new entry is unlikely to occur before late 2007 there will have been almost four years for Digital One to respond in the ways identified by NERA, which Ofcom agrees will likely be to the benefit of consumers. It is also relevant to consider that if Ofcom were to signal that it would be prepared to delay allocation of the available spectrum in response to arguments that more time was needed to recover costs that this would introduce perverse incentives.

**Longer term impact not considered by Ofcom**

A2.27 ✂ -- [redacted for confidentiality reasons] -- ✂

**Stage 5: Identification of impacts on competition**

A2.28 NERA criticises Ofcom for not analysing in any detail whether entry to the market is viable.

A2.29 As noted above, Ofcom has assessed both industry and consumer demand and considers that there is evidence of significant demand for access to spectrum assigned on a national basis for digital radio services.

**Stage 6: Assessment of impacts and choice of best option**

A2.30 NERA criticises Ofcom for not giving sufficient weight to economic considerations and suggests that Ofcom did not determine whether any firms would be able to provide local DAB multiplexes profitably in areas that do not currently have coverage from local services on the DAB platform. NERA argues that if these services cannot be profitably provided then Ofcom’s public policy objectives would not be achieved in these areas and the spectrum may have been more beneficially used for other purposes.

- A2.31 As explained in the consultation document, Ofcom, in reaching its decision to allocate three blocks to local DAB multiplex coverage and one block to national DAB multiplex coverage gave due consideration to the relevant public policy issues. The evidence available suggested that it will be viable to provide the services in most areas, although we noted that some of the smaller areas may not be financially viable. Ofcom is now consulting to determine the level of interest in individual areas.