

Radio - Preparing for the future

Phase 1: Developing a new framework

Appendix E: Regulatory impact assessments

E. Regulatory impact assessments

Duties of Ofcom

In carrying out its functions, Ofcom has a number of general duties and is required to secure certain objectives. Its 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 (section 3(1) Communications Act 2003).

In carrying out this duty, Ofcom must have regard, in all cases, to:

- the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed; and
- any other principles appearing to Ofcom to represent the best regulatory practice.

Of relevance to consideration of these proposals are Ofcom's duties set out in section 3(2) of the Communications Act 2003 to secure:

- the optimal use for wireless telegraphy of the electro-magnetic spectrum; and
- the availability throughout the UK of a wide range of TV 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.

Ofcom also considers it relevant to have regard to:

- the desirability of promoting competition in relevant markets;
- the desirability of promoting and facilitating the development and use of effective forms of self-regulation;
- the desirability of encouraging investment and innovation in relevant markets;
- the different needs and interests, so far as the use of the electro-magnetic spectrum for wireless telegraphy is concerned, of all persons who may wish to make use of it:
- the needs of persons with disabilities, the elderly and of those on low incomes;
- the opinions of consumers in relevant markets and of members of the public generally;
- the different interests of persons in the different parts of the United Kingdom, of the different ethnic communities within the United Kingdom and of persons living in rural and in urban areas; and

• the extent to which, in the circumstances of the case, the furthering of the matters mentioned in sections 3(1) and (2) of the Communications Act 2003 is reasonably practicable.

Under section 154 of the Communications Act 2003, when exercising spectrum functions, Ofcom must have regard to:

- the extent to which the electro-magnetic spectrum is available for use, or further use, for wireless telegraphy;
- the demand for use of that spectrum; and
- the future likely demand for the use of that spectrum;

and it must also have regard to the desirability of promoting:

- the efficient management and use of the part of the electro-magnetic spectrum available for wireless telegraphy;
- the economic and other benefits that may arise from the use of wireless telegraphy;
- the development of innovative services; and
- competition in the provision of electronic communication services.

Ofcom has a specific duty under section 314 of the Communications Act 2003 to carry out its functions in relation to local sound broadcasting services in the manner that it considers is best calculated to secure:

- that programmes consisting of or including local material are included in such services but, in the case of each such service, only if and to the extent (if any) that Ofcom considers appropriate in that case; and
- that, where such programmes are included in such a service, what appears to Ofcom to be a suitable proportion of them consists of locally-made programmes.

Ofcom must draw up guidance as to how it considers that these 'localness' requirements should be satisfied and must have regard to that guidance in carrying out its functions in relation to local sound broadcasting services.

Also of relevance to these proposals is Ofcom's duty under section 54(1)(g) of the Broadcasting Act 1996 to include in radio multiplex licences such conditions as appear to Ofcom to be appropriate to secure that they signals carrying the radio multiplex service attain high standards in terms of technical quality and reliability throughout so much of the area or locality for which the service is provided as is for the time being reasonably practicable.

Regulatory Impact Assessments

The analysis presented in this section, when read in conjunction with the rest of this consultation document, represents a Regulatory Impact Assessment (RIA), as defined by section 7 of the Communications Act 2003. Respondents should send any

Radio – Preparing for the future

comments on this RIA to Ofcom by the closing date for this consultation. We will consider all comments before deciding whether to implement our proposals.

RIAs provide a valuable way of assessing different options for regulation and showing why the preferred option has been chosen. They form part of best practice policy-making and are commonly used by other regulators. This is reflected in section 7 of the Communications Act, which means that generally we have to carry out RIAs where our proposals would be likely to have a significant effect on businesses or the general public, or when there is a major change in Ofcom's activities. In accordance with section 7 of the Act, in producing the RIA in this document, Ofcom has had regard to such general guidance as it considers appropriate, including related Cabinet Office guidance.

E1. Potential future licensing of VHF Band III spectrum for digital broadcasting use

Introduction

Two of Ofcom's legacy regulators, the Radiocommunications Agency and the Radio Authority, issued a joint consultation exercise on 17 October 2003, seeking views on opportunities for future use of spectrum within VHF Band III and the 1.5 GHz band. The public consultation responses identified a number of possible uses of the spectrum (the consultation and responses are available on the Ofcom website at http://www.ofcom.org.uk/consultations/past/vhf_band3/?a=87101). The consultation was followed by an economic analysis of the options for using VHF Band III. External consultants, Analysys, DotEcon and Mason assessed the economic benefits of various allocation options, taking into account technical limitations on services sharing the same spectrum blocks.

The services considered were:

- Private mobile radio (PMR);
- Public Access Mobile Radio (PAMR);
- Terrestrial Digital Audio Broadcasting (DAB) radio; and
- Portable and mobile multimedia services (over DAB and digital video technologies).

Their findings (also available on the Ofcom website) are that the economic value of the spectrum will be maximised by:

Allocating sub-band 3 of VHF Band III to five digital audio broadcasting (DAB) compatible frequency-blocks, permitting both radio and data / multimedia services. (By DAB-compatible, we mean with technical characteristics that would permit DAB use).

These findings are subject to:

- Finding a solution for existing users of the VHF Band III sub-band 3 spectrum (PMSE users) and the costs of relocating them being less than the benefits of DAB use. (Note: PMSE spectrum is used, in sub-band 3, for purposes such as radio microphones by broadcasters, theatres etc); and
- Securing international agreement on the use of this band, which will be reviewed at the Regional Radio Conference (RRC) in 2006, so that UK services can be protected from interference.

Ofcom has therefore started working to resolve these matters, with the intention of securing the conditions that would permit the spectrum in sub-band 3 of VHF Band III to be allocated in the form of DAB-compatible frequency blocks. It is our expectation, from the preliminary work which we have carried out on spectrum clearance, that either four or five DAB-compatible frequency blocks could be made available, although this would still require international agreement.

Allocation of this spectrum for DAB-compatible use does not preclude its use for other purposes (providing those other purposes can exist within the DAB specifications) although the VHF Band III spectrum considered here would not be ideally suited to alternative digital radio or multimedia platform standards; these other standards are more likely to be better suited to other spectrum (e.g. either in L-band and / or the UHF band to be released from digital TV switchover). There was no proposal for the use of the VHF Band III spectrum for these other standards in response to the consultation on the future use of spectrum within VHF Band III.

Our proposed approach to releasing spectrum for use, as set out in the Spectrum Framework Review (http://www.ofcom.org.uk/consultations/current/sfr/?a=87101), is that spectrum should be free of technology and usage constraints as far as possible. Policy constraints should only be used where they can be justified. It follows that, having packaged the spectrum in the manner most likely to meet the market's needs, our normal approach would then be to auction the spectrum in a technology-neutral manner. However, understanding that the spectrum is most likely to be used for sound broadcasting, we also need to weigh our statutory duties which relate to broadcasting. These include our duty to secure the availability, throughout the United Kingdom, 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.

We believe that DAB will become an increasingly important element of the radio market in the coming years. However, at present, a significant proportion of UK households – 14% - are not currently covered by a local radio multiplex, so cannot obtain local digital radio services by this means. In addition, our pre-consultation discussions with stakeholders have indicated that there is demand for more national carriage capacity, for radio but also potentially for other digital services, and increasing this capacity would increase competition and choice for radio service providers, listeners and advertisers. Hence, we believe there is a strong case, from a broadcasting standpoint, for dividing this spectrum, which has been packaged for DAB-compatible use, between national and local use in a manner that will best benefit the listener.

In balancing our spectrum policy of technology and usage neutrality with our broadcasting policy of enabling local terrestrial digital radio broadcasting across the UK, we have in this case concluded that applying our proposed standard approach of auctioning all of these frequency blocks in a technology-neutral manner would not produce the locally-planned multiplexes needed to deliver our radio policy objectives. This is because there is a risk that a market allocation of all of the blocks would not produce the locally-planned multiplex areas that would complete coverage of local multiplexes across the UK. We therefore consider that, for reasons of radio policy, a market allocation is not appropriate for all of the blocks in this case, and, as detailed further below, we propose to award a number of local radio multiplex licences in order to enable local terrestrial digital radio services to be available across the UK.

For the four or five blocks configured for DAB-compatible use, we propose to:

- allocate three of the five blocks for use in a number of local areas;
- allocate these as local digital radio multiplexes under the Broadcasting Act;
- allocate the one or two remaining blocks with national coverage.

We are minded to allocate these frequency blocks with national coverage under the Wireless Telegraphy Act only, without additional Broadcasting Act licences (although

the operation of any sound services broadcast on that spectrum would require a Digital Sound Programme Service licence under the Broadcasting Act).

(Note that the exact coverage that will be possible for either the national or local services will be dependent on the outcome of international co-ordination, which might restrict coverage in some coastal and border regions.)

The reasons for our proposals concerning licensing are set out in Part 2 of this Regulatory Impact Assessment. The reasons for our proposals concerning local and national allocation are set out in this part, along with our assessment of the potential effect on existing businesses.

While our aspiration is to license four or five blocks of spectrum, if, after investigation, it is not possible to clear all of this spectrum and so only possible to license fewer blocks, we would look again at the options as regards the split between local and national services.

We have also considered the potential impact on persons carrying on business in the markets for radio services. Licensing new capacity for DAB may have an impact on the existing licensees – not only the current sole holder of a national commercial licence, but businesses holding local multiplex licences too, as we would expect that increased competition in areas where an additional local multiplex is licensed would lead to those businesses losing market share.

Use of the frequency blocks for national or local services

Each frequency block identified for DAB-compatible configuration can be planned and awarded for use across the UK (or Great Britain if it is not possible to use the spectrum in Northern Ireland), or for use across a set of defined geographical areas, for local services.

For example, in digital radio (DAB) broadcasting, one frequency block is currently used for one commercial national multiplex licence, held by Digital One, which has the right to broadcast throughout Great Britain, one block has been allocated to the BBC for national coverage, and a further five blocks have been used for 46 local multiplex licences which cover defined local areas. (Note: statute defines two types of radio multiplex licence: national and local. However, some of the local multiplex licences have been allocated to cover areas encompassing several counties, which are sometimes referred to as regional multiplexes)

At present, 14% of the UK population cannot be covered by a local multiplex licence, because of a lack of available spectrum. These areas are shown in Figure 54 of the main report, "Radio – Preparing for the Future".

In the case of a frequency block being used for local services, the areas are normally licensed separately and the range of services may vary from area to area depending on local demand. A frequency block assigned to "local" use would not result in new locally-available services across the whole country but various, geographically separate, parts of it. This is because, for each geographic area assigned for use within a local block, that frequency must be unused in a significant zone surrounding the licensed area, to prevent interference between areas. The size and extent of the "neutralised" zone depends on the location and size of the licensed area, and on the surrounding terrain.

Both new national and local services would increase competition. They are therefore likely to increase choice for consumers and potentially to reduce prices for radio advertising.

In considering the best allocation of the four or five frequency blocks we expect to be available, we have had regard to the potential benefits for citizens and consumers, including the specific interests prescribed in the Communications Act and listed above. We have also considered the available estimates of economic benefits from local and national services, in order to consider whether it would be proportionate to pre-empt a potential market allocation by deciding now whether, and how many, frequency blocks should be pre-allocated for local use, as opposed to being made available with national coverage.

One of Ofcom's key considerations in radio broadcasting is geographic availability of services, or coverage. Ofcom has a duty to secure the availability, throughout the United Kingdom, 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.

Ofcom is also required to take into account the different interests of persons in the different parts of the United Kingdom, of the different ethnic communities within the United Kingdom and of persons living in rural and in urban areas.

Our recent market research, detailed in Appendix B to this Review indicates, among other things, that listeners place a distinct value on their local services, and on local radio content:

- 42% of our survey listen to a local commercial station on three days or more each week (57% on at least one day each week);
- 28% listen to their local BBC station on three days or more each week (43% on at least one day each week);
- 70% said that local news was an important factor in deciding to tune to a particular station, and 69% valued local traffic and weather:
- Over 80% said they were interested in hearing information about their own neighbourhood, town or village, and 77% were interested in information about their own county;
- Older listeners, and listeners living in rural areas, were inclined to place more importance on this type of local content; and
- Listeners prioritised local news, traffic and weather as the most important elements of local content for provision on radio – and they were for the most part satisfied with the provision of these by their existing local services.
 Source: MORI/Ofcom

In addition, local commercial radio accounts for 34.9% of all listening hours nationwide. The strength of commercial local listening suggests that it plays an important part in many listeners' lives.

Source: RAJAR, quarter 2, 2004

Taking these findings together with our duties suggests that, as digital radio listening grows in importance, we should place high importance on enabling full coverage of local terrestrial digital radio services across the UK.

Completing coverage of local digital radio services is also important in ensuring that

those households which are currently unserved by local digital services can have a similar level of choice and availability of local digital radio services, available for reception on widely-available portable receivers in the same way as analogue radio services, as most other parts of the UK. This could enable, for example, more local analogue stations to simulcast via DAB, so offering enhanced digital radio services to their listeners, or new digital-only stations or re-broadcast stations (which are currently available in other parts of the country) to become available, increasing listeners' choice. Allocation to local multiplexes would also allow additional services to be licensed in some areas which already have local multiplexes.

Relative benefits of the options

It is Ofcom's view, taking into account our general duty to consumers and our specific broadcasting duties, that:

- increases in both national and local capacity would enable broadcasting of more digital radio services, which we believe offer benefits to consumers;
- some additional local capacity would be beneficial, because of the increased choice for listeners and advertisers in local areas not currently served by local terrestrial digital radio, including the potential to receive their local radio services in digital form on a similar basis to those areas already covered; and
- some additional nationally-available capacity would be beneficial, as this could provide additional competition and choice at the national level.

We have therefore considered the optimal mix of nationally-available ("national") and locally-allocated ("local") DAB-compatible blocks, from allocating all five to local use, to allocating all five blocks for national coverage. Our considerations in the case of only four blocks being available are covered later in this section.

The various options appear to have the following broad advantages and disadvantages:

- Five local. Five local blocks, with no nationally-allocated frequency, would allow Ofcom to meet its duties in respect of securing a range of radio services across the UK, and of taking into account the interests of people in all areas of the UK, in respect of local radio services. However, use of all five blocks is not required to allow for full national coverage of local services. Further, it would not allow for increased choice and competition at the national level. From our consultations with the industry we understand that a number of service providers including, but not limited to, radio service providers would welcome the opportunity to secure national digital coverage. It would therefore appear disproportionate to use all of the potentially available frequency blocks for local services;
- Four local, one national. This allocation would increase competition at both local and national levels. However, like the previous option it would mean reserving more frequency for local multiplexes than is needed for full coverage of local services. It would therefore also appear disproportionate;
- Three local, two national. This would allow full coverage of local multiplexes in the areas that currently do not have such services, and could increase choice and competition at both local and national level;

- Two local, three national. This would similarly allow full coverage of local
 multiplexes, and would enable increased competition and choice at the
 national level, but the locally-allocated frequency blocks would need to be
 planned on a basis that would offer the people in areas currently without local
 services a different type of local choice than available in other parts of the
 country, as set out in more detail below;
- One local, four national. This would enable substantially increased competition and choice at the national level but would be unlikely to result in provision of local terrestrial digital radio services to all local areas that currently do not have such services; and
- Five national. Similarly, five national would likely increase competition at the
 national level but be expected to exclude 14% of households from access to
 local terrestrial digital radio. Ofcom considers that this would not allow us to
 fulfil our duties satisfactorily in respect of securing a range of radio services
 across the UK, and of taking into account the interests of people in all areas
 of the UK.

In light of the above points, this Regulatory Impact Assessment focuses on the following two options (in the case of there being five blocks available):

- Option 1 three local, two national; and
- Option 2 two local, three national.

The relative locations of the currently unserved areas mean that it is not possible to cover all of them with separate local multiplexes on a single frequency, because signals from one area would leak into another causing interference. By contrast, using either three or two frequency blocks, as in Options 1 and 2, could allow licences to be planned in a way that allowed extensive fill-in of areas which do not currently have a local commercial radio multiplex.

However, there are important differences between the two options. Under Option 2, with only two frequency blocks allocated for local use, the defined areas covering the unserved 14% of households would be much bigger than the areas generally covered by existing local multiplexes in other parts of the country. These areas would include the area of two or more established local analogue licences. For example, it would be necessary to have a single local area covering combinations of:

- Harrogate with York
- Gloucester & Cheltenham with Hereford & Worcester
- Carmarthenshire with Pembrokeshire and Ceredigion.

Further, using only two frequencies would necessitate combining Luton/Bedford, Milton Keynes and Northamptonshire into two service areas, which would be unlikely to match what many listeners consider to be their "local area".

Under Option 2, the 14% of households in the fill-in areas would have a different degree of choice, in comparison with areas which already have a multiplex. Importantly, these listeners would be less likely to be able to listen to their most established local commercial stations on DAB. This is because, for a multiplex covering a larger area, the cost of carriage might preclude one or more of the local stations in the area from transmitting via DAB.

Option 1, using three blocks to fill-in unserved local areas, would enable the new local licences to be planned in the same way as the local multiplexes in the rest of the country were planned; that is, broadly following the areas served by the main or longest-established local commercial station. Listeners in each of these areas would be able to benefit from increased choice to the same extent as those in the areas which already have a local radio multiplex. A three-block plan for filling in gaps could broadly replicate the analogue coverage areas of many existing local commercial stations (although not the smallest stations, or some stations in particularly congested areas). This would also make it more possible for established, popular local stations to simulcast, if they choose to do so.

Ofcom is of the opinion that, whilst Option 2 would enable increased provision, and hence competition and choice, at the national level, compared with Option 1, it seems undesirable to plan the "fill-in" local multiplex services differently from the existing provision.

Therefore, in principle, the benefits of enabling full local coverage, with unserved areas covered on the same basis as areas which already have a multiplex, appear to us to outweigh the potential benefits from increased competition at the national level under Option 2. We therefore consider that Option 1, allocating three frequency blocks to "fill in" the UK local multiplex plan, would better meet our radio duties, as set out above, than allocating just two frequency blocks for this purpose. These locally-allocated blocks would also allow for the provision of additional multiplex licences to some areas which already have them.

Further, we consider that this preference for using three blocks to fill in the UK local multiplex plan would still be valid if only four frequency blocks were available. The available consumer benefits of four blocks, and the costs of the different allocation options, are looked at in more detail below.

Potential economic benefits of allocating blocks as "national" and "local" services (in the case of five blocks being available)

In order to consider whether Option 1 is a reasonable means of achieving the policy suggested by our radio duties, we need to consider the potential economic benefits and costs of the options. That is, we need to consider whether deciding to allocate three frequency blocks for local multiplexes, in order to allow for fill-in as described above, would entail disproportionate costs when compared with other options including Option 2. To this end, we have taken into account the economic analysis commissioned from Analysys, DotEcon and Mason by Ofcom (available on www.ofcom.org.uk) and mentioned above.

In the case of five frequency blocks being available for DAB-compatible use, the economic analysis concludes that allocating three blocks for local use, and two for national (Option 1), has higher estimated potential economic benefits than all other options, including Option 2 above. It is therefore consistent with the conclusions reached in the above section, and suggests that our preferred option, of using three local blocks to fill in the local multiplex coverage, should not create disproportionate costs.

This section sets out the key conclusions from the economic analysis commissioned by Ofcom of options within a DAB-compatible allocation.

The number of individuals or households which can receive new radio and other

services is not the same for a new national frequency block as for a block allocated to local use. For each frequency block, choosing the local option means not everyone in the UK benefits from additional digital services.

On first appearances, therefore, an additional national service would seem to offer higher economic benefits than an additional set of local services limited to certain areas. However, these benefits are affected by the number of services previously available: as the number of national multiplexes grows, the incremental value to listeners and advertisers of each national multiplex declines. The analysis is different for local multiplexes, because there are, broadly, two effects, which result from the nature of planning local broadcasting areas, and which imply that the incremental value of additional blocks being assigned to local multiplexes would not decline as in the case of national multiplexes, but stay roughly constant for each additional block.

A frequency block allocated to local use means that some areas can receive a local service for the first time, delivering benefits in terms of local choice. Each additional frequency block used for local multiplexes will bring these benefits to a different group of households. As each group of households is different, the benefit to listeners is not diminished by the existence of previous local multiplexes. This element of the benefits available from a locally-allocated frequency block will depend only on how many new households become able to receive a local service with each new block. The potential benefit for each new household will not diminish with each additional block, until the point is reached when all areas of the country have a local multiplex service.

The other element of the benefits of a locally-allocated block comes from households receiving additional services. Because each frequency block can be used several times across the country, some areas already served by a local radio multiplex can receive additional local services from a further local allocation of spectrum. That is, for each block allocated locally, one group of households benefits from having their first local multiplex service, and another group of households can benefit from having an additional local (or regional) multiplex service.

With each additional block allocated for local use, the number of listeners in this second group of households may stay roughly constant, or even increase (according to preliminary analysis). This is because, as each block is allocated to fill in particular areas, the areas in which that frequency may be re-used change, and may include increasingly large populations, allowing for more households to receive additional local services, although incremental benefits would be lower than for areas allocated their first local multiplex.

The estimated net benefits of different combinations of local and national services are set out in the table below, and indicate that Option 1 offers greater potential benefits than Option 2 or any other option.

Table Fourteen. Comparison of estimated benefits from a range of allocation combinations

Allocation between national and local	Estimated Cumulative NPV benefit, £m
5 local	68.8 (lower bound 14.9)
3 local; 2 national (Option 1)	107.2 (lower bound 23.1)
2 local; 3 national (Option 2)	103.1 (lower bound 22.3)
5 national	70.8 (lower bound 15.2)

Source: Analysys Ltd, Mason Communication Ltd, DotEcon Ltd: Assessment of options for allocating available spectrum within VHF Band III and L-Band, 2004

DAB-compatible spectrum can carry other multimedia services but, at present, there is not existing market evidence of the value of such services, as they are not currently available. The economic analysis therefore assessed the potential value to listeners of radio services.

The upper bound estimates come from Analysys's baseline scenario and are based on, among other things, industry forecasts of DAB take-up from 2003 and early 2004. The lower bound estimates come from Analysys's "lowest-value" scenario, based on a much lower take-up forecast and lower values for other elements in the model. The ranking of the options is estimated not to change with the scenario chosen – either upper or lower bound.

The estimated benefits above suggest that, if five blocks are available, a combination of three locally-allocated blocks, and two national blocks, could result in marginally greater economic benefits over a combination of two local and three national, or any other option.

It follows from this analysis that pre-allocating three blocks for local use in order to meet Ofcom's public policy aims, and particularly those which relate to the availability of local digital radio services, would be unlikely to impose a disproportionate cost. We therefore propose to allocate three of the DAB-compatible frequency blocks to complete the map of local coverage.

Possibility that only four DAB compatible blocks are available

As mentioned above, Ofcom is reviewing the costs of re-locating PMSE users currently in sub-band 3 of Band III. It is possible that the costs of these users being assigned to new frequencies – including not only their costs incurred but the implied opportunity cost of their using a new frequency – could outweigh the benefits of having five DAB compatible blocks. In that case, it would be a disproportionate regulatory intervention for us to insist on configuring sub-band 3 for five blocks, and we would instead plan to configure four blocks for DAB services, with one reserved for PMSE. However we recognise that even this move may result in the need to assist users to move within the band.

If only four blocks are available, the options available to Ofcom to fulfil its duties are to assign either three or two blocks for local use. As described above, we believe that allocating three, rather than two, blocks for local use is preferable in terms of our radio duties and corresponding policy aims. However, the economic benefits (and potential costs) of this allocation would be different if only four blocks are available.

The work commissioned by Ofcom looked at the benefits available from varying allocations of five available blocks, and so did not explicitly analyse the relative benefits of allocation options if only four blocks are available. There is not, therefore, a readily-available schedule of benefits from the allocation choices using only four blocks. Looking at the listener benefits derived by Analysys, DotEcon and Mason of each individual block allocation suggests that the benefits could be, for the two main options (which remain those of highest economic value):

- Three local, one national: around £90m; and
- Two local, two national: around £96m.

The figures above seem to indicate that allocating three blocks out of four to local use would imply a reduction in net benefits estimated at around £6m, compared with allocating two to local and two to national.

Ofcom's current view is that that this would not be a disproportionate cost. We have reached this view in light of our various duties relating to radio, and to the use of spectrum. In particular, we have considered the benefits to local listeners of using three blocks to complete the coverage map, set out above, and the disadvantages of completing coverage with only two blocks. It is also worth noting that the estimated difference between the two allocations is small and potentially within the margin of error in the analysis.

However, Ofcom recognises that the relative reduction in new national capacity of choosing this option, from two blocks to one, would reduce the nationally-available competition and choice benefits for consumers and advertisers. As part of this consultation, therefore, we would be interested in any indications of potential demand for national multiplex capacity, either for radio or multimedia services.

Impact on existing businesses of allocating further spectrum to DABcompatible use

As part of the RIA, Ofcom is required to consider the impact of the proposal to license new frequencies for, among other uses, DAB radio broadcasting, on existing businesses.

Allocating two (or one) new frequency blocks for national digital services, and three new blocks for local digital services, is likely to have an impact on digital platforms, including the existing digital radio multiplexes, DTT, cable and satellite.

There will also be an impact on radio services, on all platforms, including analogue stations and stations broadcast digitally via satellite, cable, internet, DTT and DAB.

The impact on platforms

At present, there is limited competition between radio multiplexes in offering carriage options to radio stations. At the national level, there is only one commercial multiplex, which has been broadcasting since 1999. Furthermore, spectrum constraints effectively rule out the launch of additional national analogue stations for the foreseeable future.

At the local level, there are 46 multiplexes. Of the 86% of the population with a local multiplex, around 25% have only one local multiplex (in addition to the national

commercial multiplex), and a further 25% have two local multiplexes. Only in London and the Home Counties – less than 30% of the population – do most households have a choice of commercial services carried on three or more local multiplexes.

New DAB-compatible spectrum blocks would increase competition between the providers of digital carriage capacity (multiplexes). This would benefit existing and new digital stations, through increased choice and potentially lower prices for carriage. In particular, given the current scarcity of capacity in local and national multiplexes, new blocks would enable stations and services, which are currently excluded from carriage on the existing multiplexes, to secure broadcast carriage.

During our discussions with the industry, we have heard evidence of strong demand for additional multiplex capacity, and in particular for national multiplex capacity. The positive economic value of new multiplexes, as assessed by the Analysys, DotEcon and Mason report and set out above, also suggests that there would be demand for additional capacity. It is possible that, where there is excess demand, multiplex operators could be able to supply carriage at a price premium. To the extent that a price premium exists, licensing additional spectrum for national use will probably erode it and provide benefits for consumers. Similar, although perhaps less pronounced, effects may also apply to local radio services.

It is our present view that the overall benefits from increased competition are likely to be substantial while there are reasons to believe that the impact on existing businesses will be limited, partly because we think there is currently excess demand for carriage capacity, and partly because of the emerging market nature of digital radio.

At this early stage of development of digital radio, and DAB in particular, it is possible that the increase in provision of radio services broadcast via DAB will enhance the attractiveness of DAB, and thereby accelerate take-up of receivers, increasing the number of listeners available for stations and the available audience for advertisers, and as a result increasing the demand from stations for carriage capacity. This effect would reduce the impact on businesses that were currently in the market. Ofcom believes that it can be expected that in emerging markets such as digital radio, this market expansion effect is likely to be particularly important. This means that the potential impact on existing businesses can be expected to be at least partly offset by an increase in the overall size of the market.

The impact on radio or other services

Existing stations – both national and local, and on all platforms – will also face increased competition because the new capacity will increase the ability of new stations to enter national and local markets. Increased competition for listeners, and hence for advertising revenue, will have varying effects on stations' revenues, depending on their suitability for the market and the effectiveness of their offering. A similar effect could arise from the potential entry of other services, such as multimedia services, which are carried on the new multiplexes. Our current opinion is that this effect will be beneficial for listeners, potential consumers of other services and advertisers, and also for stations and services – existing ones and new entrants – who can identify, and meet the tastes and interests of, some or all listeners in the affected areas.

During our discussions with the industry mentioned above, we have heard evidence of strong demand for new radio stations in general, both analogue and digital. In addition, as described above, we think it is possible that new services available via

Radio - Preparing for the future

DAB will induce faster take-up of DAB receivers. This means that the potential impact on existing businesses, from competition for listeners, can be expected to be at least partly offset by an increase in the overall size of the market, as more listeners are able to hear the services.

The timing of the new licences will have an effect on the impact on existing businesses. We propose to publish a provisional timetable (for consultation) in the Spring of 2005, for the licensing of additional multiplexes subject to the outcome of this consultation, spectrum clearance and international agreement.

Ofcom would welcome consultation responses on this issue. In particular, it would be extremely useful to know more about the likely demand for capacity – for radio and other services – at both national and local level. This will assist us in finalising this impact assessment and, following a decision on allocation, in drawing up a licensing timetable for further consultation, taking into account all of the responses to this consultation.

E2. Broadcasting Act or Wireless Telegraphy Act licences for the new DAB-compatible spectrum

Introduction

As set out in Part 1 of this Appendix, if five blocks of DAB-compatible spectrum are available, Ofcom is proposing to allocate three blocks for local use, and two blocks with national coverage. (If there are only four blocks available, our proposal is to allocate three for local use, and one with national coverage.) For both nationally and locally-planned frequency blocks, in order to permit the licence-holder to broadcast any services, one of two types of licence could be used:

- a licence authorising the use of wireless telegraphy apparatus or stations under the Wireless Telegraphy Act 1949 ("the WT Act");
- a combination of a WT Act licence together with a Broadcasting Act radio multiplex licence.

The main differences between these two types of licence are set out below.

Given Ofcom's preference for allowing the market to decide upon the best use of the spectrum, we are minded to allocate the frequency blocks for national coverage under the WT Act, with out the need for a Broadcasting Act licence. However, as outlined below, Broadcasting Act licences are subject to a range of specific regulations for public policy reasons and we wish to consult on the implications of not applying these to the proposed new national DAB-compatible frequency blocks.

The reasons for our proposals concerning local and national allocation are set out in Part 1 of this Appendix. The reasons for our proposals on using WT Act licences alone, or in combination with Broadcasting Act licences, are set out in this section.

The proposal set out in this document is:

- to use Broadcasting Act radio multiplex licences, in combination with WT Act licences, for the spectrum allocated to fill in areas which do not currently have a local commercial radio multiplex service, and other local areas which do; and
- to consider awarding the spectrum blocks with national coverage via a market process, licensed under the WT Act alone. Although the provision of a multiplex service would not need a Broadcasting Act licence, the provision of any sound services broadcast on that spectrum would require a Digital Sound Programme Service licence, under the Broadcasting Act.

We have also considered the potential impact on persons carrying on business in the markets for radio or other relevant services. Licensing new capacity under either the Broadcasting Act or the Wireless Telegraphy Act may have different effects.

The licence options

This section describes the key aspects of Broadcasting Act licences and WT Act

licences, and the differences between using WT Act licences alone, and combining them with Broadcasting Act licences.

Wireless Telegraphy Act licences which may be used for digital broadcasting

Until the implementation of the Communications Act, all digital radio or television broadcasting required a specific Broadcasting Act licence, authorising the provision of a multiplex service, in addition to the Wireless Telegraphy Act licence that authorised the use of wireless telegraphy stations or apparatus.

The Communications Act 2003 introduced the possibility of authorising the provision of a multiplex service under a WT Act licence alone, without an accompanying Broadcasting Act multiplex service licence. The holder of such a licence may carry any type of service unless expressly prohibited by the licence conditions. In particular, this licensee could carry television or radio services without the need for a separate Broadcasting Act multiplex licence. (The television and radio services themselves would need to have the appropriate programme licence under the Broadcasting Act 1996.)

This type of licence has very few statutorily defined characteristics.

Broadcasting Act licences

The framework for awarding and regulating Broadcasting Act radio multiplex licences was created in the Broadcasting Act 1996 and amended in the Communications Act 2003. Broadcasting Act radio multiplex licences are awarded following a competitive process, in which Ofcom must assess applicants according to statutory criteria, including the types of radio services each applicant proposes to provide. Currently, the legislation stipulates that a minimum of 80% of the capacity on a radio multiplex must be used for digital sound programme services, simulcast radio services, programme-related services and relevant technical services.

There are also television multiplex licences, which were created by the Broadcasting Act 1996 and amended in the Communications Act 2003.

At present, all of the terrestrially-broadcast radio services in the UK are carried on either a Broadcasting Act radio multiplex or television multiplex service. There are currently no multiplexes licensed under the WT Act alone, without a separate Broadcasting Act licence.

Key differences between Broadcasting Act and Wireless Telegraphy Act licences

Broadcasting Act licences are subject to specific statutory provisions covering a wide range of issues, from who may or may not own a licence to a requirement that each new licence should increase the range and diversity of digital radio services in the area. In addition, Ofcom has powers to impose additional conditions in licences as a matter of broadcasting or competition policy.

WT Act licences are not subject to equivalent statutory provisions, and the range of conditions which Ofcom may impose on licensees is more limited. There would be differences in the conditions that can be imposed on a WT Act licence and a Broadcasting Act multiplex licence. These stem in part from the fact that WT Act licences authorise the use of wireless telegraphy stations and / or apparatus, whereas Broadcasting Act licences authorise the provision of broadcasting services.

It is also relevant that procedures and conditions relating to WT Act licences are subject to the requirements of the European Communications Directives⁷.

The differences that we consider to be particularly important are set out below, but broadly include:

- the flexibility of the operator over which services to provide;
- the award process;
- · provisions regarding ownership and plurality; and
- the inclusion of ex ante competition conditions.

There is a further difference which applies only to local Broadcasting Act licences, relating to carriage of local BBC services, which is also discussed below.

Flexibility over services provided via the multiplex

A Broadcasting Act radio multiplex licence is subject to various licence conditions as to the type and range of services provided.

The first such condition is required to be in the licence under s54 of the Broadcasting Act 1996, and stipulates that any licence must ensure that a minimum of 80% of the information capacity on the multiplex is to be used for digital sound programme services, simulcast radio services, programme-related services and relevant technical services. This constraint is set down in the Broadcasting Act 1996 and may be amended by Order by the Secretary of State; it was reduced from 90% to 80% by Order in 1998.

The second constraint is also delivered via licence conditions. Ofcom is required to include such licence conditions as are appropriate to secure the implementation of the bidder's proposals as to:

- the timetables for providing the service to specified parts of the licensed area;
- the provision and maintenance of the service over the licence period;
- the delivery of radio services which cater to the tastes and interests of persons living in the licensed area;
- the delivery of radio services which broaden the range of digital radio services delivered via multiplex in the area.

The latter two requirements above are met by the inclusion of conditions in the multiplex licence specifying the types of radio service that the licensee will carry. These conditions may be varied, at the request of the operator, if Ofcom is satisfied (in the case of a local radio multiplex licence):

⁷ Directive 2002/21 on a common regulatory framework for electronic communications networks and services ("the Framework Directive"); Directive 2002/20 on the authorisation of electronic communications networks and services ("the Authorisation Directive"); Directive 2002/19 on access to, and interconnection of, electronic communications networks and associated facilities ("the Access and Interconnection Directive"); Directive 2002/22 on universal service and users' rights relating to electronic communications networks and services ("the Universal Services Directive"); and Directive 2002/77 on competition in the markets for electronic communications networks and services.

- that the variation would not unacceptably narrow the range of programmes available by way of local digital sound programme services to persons living in the area or locality for which the licensed multiplex service is provided;
- that the variation would be conducive to the maintenance or promotion of fair and effective competition in that area or locality; or
- that there is evidence of significant local demand or support for the proposed variation.

In the case of a national radio multiplex licence, Ofcom must not vary the licence if the proposed variation would unacceptably diminish the capacity of the digital sound programme services broadcast under the licence to appeal to a variety of tastes and interests.

A WT Act licence is not subject to any of the above statutory constraints. The WT Act 1949 (as amended by section 165 of the Communications Act) confers powers on Ofcom to impose conditions as to the services carried on a WT Act licence. Under these powers Ofcom may prohibit, or require, the transmission or broadcasting of particular matters by the licensee. Ofcom could, therefore, require a minimum number of radio services, or even stipulate certain types of radio service.

There is a further effective constraint on a local radio multiplex licence awarded under the Broadcasting Act, which requires that Ofcom, in awarding a local radio multiplex licence, must ensure that a reserved amount of capacity is available for the BBC to purchase, at reasonable terms, for the digital broadcast of its local or nations' radio service in that area.

This requirement does not automatically apply to Ofcom in issuing a WT Act licence.

Licence award process

Under the Broadcasting Act, radio multiplex licences are awarded under a "beauty parade" process. Ofcom decides between applications by reference to statutory criteria. These statutory criteria are:

For local multiplexes

- the extent of the coverage area (within the area specified in Ofcom's notice) that the applicant proposes to cover as indicated in the technical plan submitted by him;
- the timetables proposed by the applicant to achieve that coverage and begin broadcasting each digital sound programme service (other than BBC services);
- the ability of the applicant to establish the proposed service and to maintain it throughout the licence period;
- the extent to which the digital sound programme services (other than BBC services) proposed to be included in the service would cater for the tastes and interests of persons living in the area or locality for which the service is to be provided and, where it is proposed to cater for any particular tastes and interests of such persons, the extent to which those services would cater for those tastes and interests;
- the extent to which any such digital sound programme services would broaden the range of programme available by way of local digital sound

programme services to persons living in the area or locality for which it is to be provided and, in particular, the extent to which they would cater for tastes and interests different from those already catered for by local digital sound programme services provided for that area or locality;

- the extent to which there is evidence that, amongst persons living in that area
 or locality, there is a demand for or support for, the provision of the proposed
 service; and
- whether, in contracting or offering to contract with persons providing digital sound programme services or digital additional services, the applicant has acted in a manner calculated to ensure fair and effective competition in the provision of those services.

For national multiplexes

- whether the award of the licence to each applicant would be calculated to promote the development of digital sound broadcasting in the UK otherwise than by satellite;
- the extent of the coverage area (within the area specified in Ofcom's notice) that the applicant proposes to cover as indicated in the technical plan submitted by him;
- the timetables proposed by the applicant to achieve that coverage and begin broadcasting;
- the ability of the applicant to establish the proposed service and to maintain it throughout the licence period;
- the capacity of the digital sound programme services proposed to be included in the service to appeal to a variety of tastes and interests;
- any proposals by the applicant for promoting or assisting the acquisition, by persons in the proposed coverage area of the service, of equipment capable of receiving the service; and
- whether in contracting or offering to contract with digital sound programme service providers or digital additional service providers, the applicant has acted in a manner calculated to ensure fair and effective competition in the provision of such services.

WT Act licences authorising the use of wireless telegraphy apparatus or stations for broadcasting a multiplex service could be awarded under a beauty parade, or under an auction process.

Ownership and plurality requirements

Broadcasting Act licences are subject to ownership rules, which cover two different aspects of radio licence ownership and are intended to achieve two aims:

- to prevent ownership of a broadcasting licence by disqualified persons; and
- to preserve a minimum level of plurality in radio broadcasting.

Disqualified persons

For Broadcasting Act multiplex licences, there are specific statutory disqualifications of certain categories of persons from holding licences or participating over a certain threshold in licensee companies. These categories are:

Radio – Preparing for the future

- religious bodies;
- · political bodies;
- local authorities;
- UK publicly-funded bodies;
- bodies exerting undue influence;
- broadcasting bodies; and
- · advertising agents.

Restrictions also apply to persons convicted of broadcasting offences (essentially pirate broadcasting). More generally, any holder of a Broadcasting Act licence must be "fit and proper" to do so.

There are currently no categories of persons automatically disqualified in statute from holding a WT Act licence.

Plurality of ownership

There are statutory rules intended to preserve plurality of ownership of Broadcasting Act licences, specifically including:

- national radio multiplex licences; and
- local radio multiplex licences.

No one person may hold more than one national commercial radio multiplex licence.

No one person may hold licences for two local radio multiplexes that overlap⁸. Overlap, in the context of this rule, means that the potential audience of one service includes at least half the potential audience of the other.

No such statutory rules apply to Wireless Telegraphy Act licences. However, Ofcom has a general duty to secure a sufficient plurality of providers of broadcasting services and so, to the extent that such a licence may be used for broadcasting either radio or television, among other services, it might be desirable to ensure, through the award process and ongoing licence conditions, that effectively identical rules applied to the owners of WT Act licences.

There are also plurality rules limiting the number of local digital sound programme services that may be provided by one person on a local radio multiplex, or across overlapping multiplexes (as defined above). These are set out in the Media Ownership (Local Radio and Appointed News Provider) Order 2003 (SI 2003/3299). If a local multiplex was licensed under a WT Act licence alone, it may be desirable, having regard to Ofcom's general duty to secure a sufficient plurality of providers of broadcasting services, for ownership rules with the same effect to be applied to providers of local digital sound programme services on WT Act multiplexes.

⁸ Multiplex overlaps are evaluated based on the Primary Protected Areas ("PPAs") of the multiplexes. The PPA is area within which Ofcom, in its regulation of other multiplex operators, will seek to protect a given service from interference.

Including ex ante competition conditions

In issuing a Broadcasting Act radio multiplex licence, Ofcom is required to include appropriate conditions to secure that, in the terms on which the licensee contracts (or offers to contract) with digital sound programme service providers or digital additional service providers, he does not show undue discrimination against or in favour of a particular person or class of persons providing such a service⁹.

In addition, radio multiplex licences must include appropriate conditions to secure that the licensee does not include, in any agreement with a digital sound programme service provider or digital additional service provider for the use of a specified amount of digital capacity, a restriction on that person's freedom to make arrangements with a third party as to that use of that digital capacity¹⁰.

In issuing Broadcasting Act licences for either radio or television multiplexes, Ofcom may include appropriate conditions for securing fair and effective competition, subject to a test of whether it would be more appropriate to proceed under the Competition Act 1998 (sections 316 and 317 Communications Act).

All Broadcasting Act multiplex licences currently include a general fair and effective competition condition, and it is Ofcom's policy to include this condition in all Broadcasting Act licences (subject to consideration of any representations from individual licensees as to why it is not appropriate for the condition to be included in their particular case).

Ofcom is not empowered to include ex ante competition conditions similar to the above competition conditions in a Wireless Telegraphy Act multiplex licence.

Our proposals

Ofcom proposes:

- to use Broadcasting Act radio multiplex licences, in combination with WT Act licences, for the spectrum allocated to fill in areas which do not currently have a local commercial radio multiplex service, and other local areas which do:
- to consider awarding the spectrum blocks with national coverage via a market process, licensed under the WT Act alone. Although the operation of the spectrum would not need a Broadcasting Act licence, the operation of any sound services broadcast on that spectrum would require a Digital Sound Programme Service licence, under the Broadcasting Act.

Locally-allocated spectrum

In the case of the locally-allocated spectrum, Ofcom believes it is appropriate to use the same allocation and licensing regime as has applied to the other 46 local radio multiplexes.

The key reason for this conclusion is that it is possible to guarantee the provision of a wide range of radio services on a multiplex licensed in this way. Ofcom's main objective, in securing spectrum for local multiplex licensing, is to ensure that the 14% of households which are not currently covered by a local commercial multiplex may in

⁹ Section 54 (1)(e) Broadcasting Act 1996.

¹⁰Section 54 (1)(f) Broadcasting Act 1996.

future have access to the same degree of local radio choice as households in all other parts of the country. This objective relates to, among other duties, our duty to secure the availability throughout the United Kingdom of a wide range of television and radio services. The objective also reflects the market research cited in Appendix B, which appears to demonstrate that local radio services are important to listeners.

Respondents may also wish to consider that, if we choose to issue local radio multiplex licences under the terms of the Broadcasting Act, Ofcom is required to secure reserved capacity such that it is possible for the BBC to purchase carriage of its relevant local radio service.

Frequency allocated with national coverage

For the one or two national blocks of spectrum potentially available which we propose to allocate with national coverage, Ofcom is minded to issue Wireless Telegraphy Act licences only, without the need for a Broadcasting Act licence.

The main advantages of using Wireless Telegraphy Act licences are:

- a market-led, rather than regulator-led, allocation of spectrum; and
- flexibility for the licensee over the services provided.

As stated above, and in our Spectrum Framework Review, Ofcom's proposed standard approach to spectrum released for use is to auction it in a technology-neutral manner. Using an auction process to award WT Act licences, without additional Broadcasting Act licences, for the frequency blocks with national coverage would fit with this approach.

However, there are other important differences between a Broadcasting Act multiplex licence and a WT Act licence, as discussed above. The new licences would be different from the existing national commercial radio multiplex licence, held by Digital One, in various ways. The four examples we consider to be particularly important are:

- the flexibility of the operator over which services to provide the new licence could have no, or minimal, service prescriptions and prohibitions;
- the award process a new licence would probably be awarded by auction;
- provisions regarding ownership and plurality disqualified person `ownership
 prohibitions would not apply to a WT Act licence, and plurality rules would
 apply only if Ofcom decided that these were necessary to achieve its general
 plurality duty; and
- the inclusion of ex ante competition conditions. These would not apply to a WT Act licence.

Ofcom would like to consult on using WT Act licences only, for the national allocations because we feel that these new, light-touch licences, introduced in the Communications Act, have a great deal to offer in terms of flexibility and space for operators to innovate and to adjust their offering to consumers more swiftly than would be possible with a Broadcasting Act licence.

However, we also recognise that respondents may have specific concerns in relation to the radio broadcasting market, for example that certain specific conditions and restrictions which relate to Broadcasting Act licences should continue to apply to

these national spectrum licences.

These would be the first national spectrum licences which may be used for broadcasting issued since the Communications Act came into force. Ofcom therefore considers that it is right to conduct a wide consultation on the benefits of the two options now open to us, and the option we are minded to pursue for these frequency blocks allocated with national coverage, of issuing WT Act licences only, without a separate Broadcasting Act licence.

Impact on existing businesses

As part of the RIA, Ofcom is required to consider the impact of this proposal to license certain frequency allocations under the Broadcasting Act, and others under the Wireless Telegraphy Act alone, on existing businesses.

The main effects of allocating four or five new frequency blocks for DAB-compatible use are discussed in Part 1 of this RIA, which deals with the allocation of the blocks between national and local use.

With respect to the choice between licensing under the WT Act only, or using Broadcasting Act licences, the main difference relates to the fact that WT Act licence-holders would have more flexibility to carry multimedia services and would not be bound by the 80% minimum capacity reserved to radio under a Broadcasting Act licence. Here we briefly explore whether the choice of type of licence for the frequency blocks with national coverage could make a difference to the impact on existing businesses.

The impact on platforms

It is difficult to predict whether, and how, the choice of licence would result in a difference in impact on existing providers. In theory, it could be argued that a new national WT Act multiplex would be more flexible and potentially have a stronger impact on the existing provider. However, it is difficult to establish whether this could be substantial as it will largely depend on the relative demand for radio and multimedia services, on which we are seeking views.

The impact on radio and other services

The impact on existing providers of radio services will depend on the relative demand for radio and multimedia. Under a Broadcasting Act licence, a multiplex will have to dedicate a minimum of 80% to radio services, while no minimum applies to a WT Act licence. Even in the presence of strong multimedia demand, a Broadcasting Act licensee will have to give preference to radio. In this case, more radio services are likely to be provided than under a WT Act licence alone, and thus any adverse impact on existing radio providers is likely to be more marked.

Conversely, if most of the demand for carriage comes from radio services, there will be a similar number of new radio services on either type of multiplex, and so there are no reasons to believe that the choice between the two types of licence will lead to a different impact on existing radio services.

The impact on multimedia providers similarly will depend on the relative demand of radio and multimedia services. In the presence of strong demand for multimedia services, a WT Act licensee could dedicate all his capacity to such services, while a Broadcasting Act licensee could only provide 20% of its capacity to these services. The impact on existing multimedia providers could therefore be more marked under a

Radio – Preparing for the future

WT Act licence.

Ofcom considers that the choice between WT Act and Broadcasting Act licences is unlikely to have a significant differential impact on existing businesses. We therefore consider that, in general, the conclusions reached in Part 1 of this Appendix remain valid if WT Act licences alone are used.

As set out in the consultation document, Ofcom welcomes responses on the issues discussed in this RIA.

E3. Regulation of Technical Quality

Introduction

Ofcom has statutory duties in relation to the technical quality of broadcasts. These are:

- CA03 Sect.3(2)(c): to secure the availability throughout the UK of a wide range of television and radio services which (taken as a whole) are of high quality;
- BA96 Sect.54(1)(g), to include appropriate conditions for securing that signals carrying radio multiplexes (including their 'payload' of sound channels) should attain high standards of technical quality.

At the moment, Ofcom sets minimum bit-rates within a Technical Code. Ofcom is considering whether these should change, in the light of technological progress made since the present provisions were established.

It is only the regulation of sound quality which is affected by the proposals set out in this document. Provisions relating to coverage of services, including robustness of reception, are unchanged.

Policy Options

- No change. Leave the current rules as they are, based on a minimum capacity (bit-rate) for each sound service;
- Reduce the allowable minimum bit-rate. Retain the current regulatory approach, but reduce the allowable minimum capacity;
- Establish a system of co-regulation, based on outputs. Replace the current approach with a co-regulatory system in which licensees are required to establish and apply appropriate criteria and practices for securing quality, backed up by Ofcom; and
- Apply external regulation to all relevant factors which determine quality.
 Replace the current approach with a comprehensive set of detailed regulatory
 requirements in relation to the generation, handling (including storage and
 retrieval) and coding of audio broadcast on digital radio.

Option Evaluation

No change

Technological progress has enabled new coders to deliver better sound quality with the same bit-rate, or to achieve the same quality with a reduced bit-rate, which in turn would enable more services to be carried on a digital multiplex.

It is probable that retaining exactly the current provisions (requiring at least minimum bit-rates) would disincentivise investment in new, better, coders, and would therefore not secure Ofcom's statutory duty to have regard where relevant to the desirability of

encouraging investment and innovation in relevant markets (section 3(4)(d) Communications Act 2003).

Reduce the allowable minimum bit-rate

This option would enable investment in new coders to yield benefits of the investor's choosing (more services, or better quality, or even both). However, in other cases there would be no regulatory barrier to prevent the use of lower bit-rates without improving coding. This would increase the possibility of inadequate quality being delivered within the allowable conditions and with the assumed endorsement of the regulator. While there are still relatively few receivers, feedback from listeners may be less likely to have an influence on broadcasters' decisions on quality of service. Although the industry as a whole is nevertheless likely to maintain standards for commercial reasons, we consider that this option could be an ineffective discharge of a statutory responsibility.

Bit-rate is just one of the factors affecting quality, and despite the advantage of simplicity, we consider that regulating this one input factor alone is not the most effective way to regulate quality.

Establish a system of co-regulation, based on outputs

This would be likely to facilitate and encourage investment, taking advantage of the change in regulations. Developments in coders tested to date would allow about a 10% effective increase in capacity, which equates to a benefit of up to around £4-5 million/year based on access revenues alone. Alternatively, this would allow an improvement in audio quality at the same level of capacity use. We consider that this proposal would further Ofcom's duty to secure the optimal use of the electromagnetic spectrum and the availability of a wide range of radio services which (taken as a whole) are of high quality (section 3(2)(a) and (c) of the Communications Act).

Adopting a co-regulatory approach based on a simple, output-based code, as laid out in section 7.8 of the main consultation document, has the following benefits:

- the industry as a whole is best placed to decide in detail how to reconcile the
 conflicting demands of quantity and quality in the interests of building and
 maintaining overall listener satisfaction, especially given the significant
 investments being made to build digital radio as a consumer proposition;
- it fulfils Ofcom's duty to have regard where relevant to the desirability of promoting and facilitating the development and use of effective forms of selfregulation (which includes maintenance of dialogue) (section 3(4)(c) Communications Act 2003).

There are two potential disadvantages of the approach.

- Using the co-regulatory process to resolve demonstrably unsatisfactory quality broadcasts could be quite slow to apply. However, this appears unlikely to be needed for the industry as a whole;
- The process of compiling and reporting activities on quality implies an additional burden for licensees. However, Ofcom's understanding is that the work undertaken in the industry relating to quality is already significant, and

the incremental burden of light, high-level reporting should be small in context.

Apply external regulation to all relevant factors which determine quality

The range and interdependency of factors which affect sound quality on digital radio is quite complex, and the development of core technologies is rapid, which would make a truly accurate external regulation of quality burdensome for regulator and regulated alike. It would require the application of a comprehensive set of detailed regulatory requirements in relation to the generation, handling (including storage and retrieval) and coding of audio broadcast on digital radio.

Preferred option: To establish a system of co-regulation, based on outputs.

A new, output-based Code would require licensees to make properly informed choices about the objectives appropriate to the services carried, and the technical provisions necessary to achieve them. It also provides the means for Ofcom to intervene in the event that the outcomes are, by general consensus, not serving the public interest. The proposed code is laid out in section 7.8 of the consultation document.

E4. The regulation of localness on analogue commercial radio

Policy Proposals

There are four areas where policy changes have been proposed in relation to the regulation of local commercial analogue radio. The areas are:

- Studio location;
- Automation;
- · Local news delivery; and
- Ensuring compliance.

Studio Location

Under section 314, Ofcom is required to secure that where programmes consisting of or including local material are included in a station's format, a "suitable proportion" of them consists of locally-made programmes. "Locally-made" is defined in the legislation as "made wholly or partly at premises in the area or locality for which that service is provided". Currently, Ofcom applies "locally-made" as made in a station's Measured Coverage Area ("MCA"). However, there are different ways in which this could be interpreted.

Options

- Programmes must be made at premises in a station's Total Survey Area ("TSA") in order to be "locally-made";
- Programmes must be made at premises in the MCA of a station in order to be "locally-made" (current situation); and
- Programmes must be made at premises in the area which the licence is designed to service, as set out in the original licence advertisement ("licensed area") in order to be "locally-made".

Option Evaluation

Programmes must be made at premises in the station's Total Survey Area ("TSA") in order to be "locally-made"

A station's TSA is defined by the radio company. It is the area within which the station seeks to measure its audience. It is not a statutorily defined concept, and is not used for regulatory purposes. A station can change its TSA whenever and however it wishes. A station's TSA can be smaller or larger than its MCA or licensed area. We consider that this option is not appropriate because a station's TSA can be changed as a station wishes. Accordingly, using TSA would not give a sufficiently clear and stable regulatory outcome.

Programmes must be made at premises in the Measured Coverage Area of a station in order to be "locally-made"

This would continue the current requirement (established by the Radio Authority) that stations providing locally produced and presented output should do so from a studio located within their MCA. The MCA is a technically-defined area within which radio signals of a certain strength can be received.

We consider that this would satisfy the requirement in relation to "locally-made programmes" under section 314 of the Communications Act. It would provide a clear and stable regulatory outcome, as each station's MCA is defined by Ofcom. However, this definition means that stations cannot produce "locally-made" content from all locations within their licensed area, as the MCA is generally smaller than the licensed area.

Programmes must be made at premises in the area which the licence is designed to serve, as set out in the original licence advertisement ("licensed area") in order to be "locally-made"

This option would allow stations to have greater flexibility in where they locate their studios and produce "locally-made" content than is presently the case. It may allow some radio stations operating in nearby areas to co-locate studios, to the extent their licensed areas overlap but their MCAs do not.

Co-locating studios can result in significant savings on premises and administrative overheads. It could also make it easier to put in place more effective management and career development structures.

We consider that this option would allow Ofcom's and licensees' obligations under section 314 of the Communications Act to be satisfied with the potential benefits outlined above and without any additional net cost to Ofcom or licensees. We do not believe that this slight increase in the area in which a station can locate its studios will adversely affect localness. Therefore, this is our preferred option. In selecting this as our preferred option, we have had regard to the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed (as we are required to do under section 3(3) of the Communications Act).

Automation

Automation was defined by the Radio Authority as "computer controlled programming, involving the music, voice tracks, drop-ins, commercials and other programming elements being played in accordance with a pre-defined schedule and which is not under the direct control of an on-air presenter" (Radio Authority Programme Code, part 23).

The current automation rules, drawn up by the Radio Authority, differ by waveband and station size, as laid out in the consultation document, but, in summary, are generally limited by the Programme Code to between two and four hours per day during daytime hours, apart from a handful of specific exemptions, where more than four hours of automation are permitted. The question is whether these rules on automation are necessary in order for Ofcom to perform its statutory duties.

Options

- Leave the current automation rules as they are
- Remove specific limits on the amount of automation

Option Evaluation

Leave the current automation rules as they are

There is no direct statutory requirement to regulate automation. As set out in the consultation document, the automation rules were established by the Radio Authority because of concerns about the quality of automated output, and to act as a 'proxy' for localness.

We consider that continuing with the current automation rules would satisfy Ofcom's duty to ensure the availability of a wide range of radio services which (taken as a whole) are of high quality, and would satisfy Ofcom's duties in respect of localness.

Remove specific limits on the amount of automation

While the current rules on automation would satisfy the duties outlined above, having regard to the principles under which regulatory activities should be proportionate and targeted only at cases in which action is needed, we consider that the specific limits on the amount of permitted automation should be removed, subject to certain safeguards.

This deregulatory proposal would, we consider, still satisfy Ofcom's obligations to secure quality of output. This is because, as outlined in the consultation document, as the sophistication of automation has improved, we no longer believe it is necessary for automation to be restricted to a specific amount in order to guarantee quality. We consider that this proposal would also still secure Ofcom's duties in relation to localness under section 314 of the Communications Act, as each station's format defines a certain number of hours which must be locally made and presented and these limits would still apply (automated content during these hours would still have to include local material and be locally-made).

In addition, we believe it is appropriate to have guidance that stations should be able to respond to local events in a timely manner and provide live local programming in the way and at times that audiences expect.

This option, removing specific limits on the amount of automation, would give stations more flexibility in terms of the production of their programming and would not involve any additional cost to the industry or Ofcom in itself. However, as set out below, we consider that the package of deregulatory proposals (including this one) in relation to local analogue radio broadcasting on which we are consulting would require safeguards to be put in place. The impact and the costs of those safeguards are discussed below.

Local news delivery

At present, with very few exceptions, each station's licence includes a requirement to produce local news, which, implicitly, is locally presented. This is the only current format requirement for most stations in relation to local news.

The Radio Authority considered that the provision of local news was covered as part of the 'locally produced and presented' output requirements in each station's format,

and, therefore, any station whose format calls for locally produced and presented output is currently required to produce any local news bulletins from a studio within its coverage area. The Radio Authority also stated that all such stations must have a journalistic presence (i.e. an in-house news operation) unless permission for alternative arrangements had been given.

These alternative arrangements are known as 'news hubs', and involve a station being allowed to broadcast local news bulletins presented from another radio station's studios. The Radio Authority agreed to such arrangements in only a limited number of cases, and only for stations in common ownership within a geographically-limited area. The formats of such stations specify the exact out-of-area station from which bulletins must be presented, and also require the maintenance of a full-time or demonstrable journalistic presence for a specified period (either eight daytime hours – i.e. at least one journalist, or weekday daytime - 6am-7pm – i.e. at least two journalists).

The requirements of news hub arrangements go beyond what is set out in stations' formats, however. The Radio Authority also required that the information about the news hub that had been included in the application for such an arrangement (such as aggregate staffing levels across participating stations, the location of the news hub, weekend arrangements and the pre-recording of bulletins) formed part of the agreement, and could not be deviated from without the permission of the Authority.

Ofcom's objective is to ensure the provision of a high quality news service, including local and national news, by local radio stations, to the extent required by each station's format. We have considered options which would allow us best to achieve this objective.

Options

- Leave rules as they are (i.e. local news must be locally made and locally
 presented unless stations are expressly granted permission to set up news
 hubs, with whatever additional regulations Ofcom deems appropriate);
- Allow stations to form news hubs without a requirement to ask for permission, while ensuring full time local journalistic presence. Local news provision would remain in licensees' formats but no longer be included as part of the 'locally produced and presented' output; and
- No regulation on the location of news readers or on journalistic cover.

Option Evaluation

Leave rules as they are (i.e. local news must be locally made and locally presented unless stations are expressly granted permission to set up news hubs, with whatever additional regulations Ofcom deems appropriate).

As discussed in the consultation document, the current rules were put in place by the Radio Authority to protect the presence of local, on-site journalists and to ensure that stations do not use news hubs simply as a cost-cutting measure. We consider that retaining these rules would meet the localness requirements of S314 of the Communications Act.

Allow stations to form news hubs without a requirement to ask for permission, while ensuring full time local journalistic presence. Local news provision would remain in

licensees' formats but no longer be included as part of the 'locally produced and presented' output.

The main advantage of news hubs is that they can free up reporting staff to carry out more local newsgathering, while a centralised team can compile and present bulletins for a number of stations.

In making the changes which would allow news hubs without prior regulatory approval, however, we believe that some guidelines are needed regarding local journalistic presence. Under this option, therefore, the proposal is that each station should provide direct and accountable editorial responsibility, based within the licensed area, equivalent at least to full time professional journalist cover for all of the hours during which its licensed format specifies that it will provide local news programmes.

Listeners in our survey felt it was important that local stations had local news reporters but, providing this was the case, didn't mind where the news was read from.

As laid out in the consultation document, we do not believe that the timeliness or quality of news would be adversely affected by these changes. Indeed, we believe that it gives stations the flexibility and opportunity to potentially increase the timeliness and quality of local news output.

We consider that this would allow Ofcom's and licensees' obligations regarding localness under section 314 of the Communications Act to be satisfied. This would also satisfy our duty to secure high quality as we are required to under section 3(2) of the Communications Act.

Of the options we have identified, this is our preferred option. In selecting this as our preferred option, we have had regard to the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed (as we are required to do under section 3(3) of the Communications Act). However, as outlined in our consultation document, we would welcome views as to whether there is a better way to meet our objective which is more consistent with our aim of moving the emphasis from input to output regulation.

This option may involve additional cost if the stations do not currently have a full time journalistic presence.

In addition, as set out below, we consider that the package of deregulatory proposals (including this one) in relation to local analogue radio broadcasting on which we are consulting would require safeguards to be put in place. The impact and the costs of those safeguards are discussed below.

No regulation on the location of news readers or on journalistic cover It is our present view that having no regulation on journalistic cover would not allow Ofcom to ensure that the quality of the radio service did not suffer, as we are required to do under section 3(2) of the Communications Act.

It would not protect against the original concern of the Radio Authority that allowing news hubs would simply be used to cut costs or their belief that, in the absence of a local news presence, the news hub would drift further away from the local station's area, leaving significant local stories to be covered remotely and bulletins to be recorded even further in advance of transmission.

Ensuring compliance

The present restrictions on the level of automation, the method of local news delivery and studio location requirements, were all introduced by the Radio Authority as 'proxies' for localness and/or quality, both of which are legislative concerns for Ofcom. If these 'proxy' regulations are to be loosened, Ofcom will require a way to ensure that licensees' output complies with the obligations set out in their formats.

The Radio Authority did not conduct routine monitoring, and largely relied upon complaints from listeners and/or competitors to indicate cases of non-compliance. In practice, there was a large degree of trust between stations and the Radio Authority to ensure commitments were being met.

Options

- To continue to rely largely on complaints to monitor stations;
- To create a format and localness file system where stations would show details of how they are meeting localness and local news obligations and how much of their output is automated. Ofcom would continue to carry out spot checks and investigate complaints; and
- To have regular formal returns collected and checked by Ofcom.

Option Evaluation

To continue to rely largely on complaints to monitor stations

The Radio Authority did not conduct routine monitoring, and largely relied upon complaints from listeners and/or competitors to indicate cases of non-compliance. However the Communications Act now lays a specific responsibility for localness on Ofcom. A system that solely relied on complaints may carry a risk that the new statutory duties are not fulfilled, particularly if our proposals to focus more on outputs and less on input regulations are accepted.

To create a format and localness file system where stations would show details of how they are meeting localness and local news obligations and how much of their output is automated. Ofcom would continue to carry out spot checks and investigate complaints

A format and localness file system would reflect the transparency and openness encouraged by Ofcom. It would not, and should not, negate the need for Ofcom monitoring where it is felt necessary, but could contain the operation to the point where only occasional spot-checks would be required.

The file will be used to help Ofcom monitor the statutory localness obligation under section 314 of the Communications Act. As such, we consider that this proposal would help to secure Ofcom's duties in relation to localness. The new requirements are to help to ensure that the relaxation of the regulations do not lead to a reduction in the delivery of localness, as required by the station formats, and overall quality which, as noted above, are legislative duties. In addition, the data that is provided may be used to provide evidence for Ofcom's change of control reviews under section 355 of the Communications Act.

Radio – Preparing for the future

There will be extra cost to the industry in collecting and providing this information. This may be offset, in part or in total, by the benefits from implementing the other proposals described above. However, for stations who do not decide to take advantage of the proposals, this would represent an additional cost without any benefit.

The compliance costs may be proportionately higher for smaller stations than larger stations. However smaller stations may also tend to have fewer variations in journalists, journalists rosters, automation and networking. Therefore, it is possible that they will not need to make frequent changes to the file.

It is proposed that this will be carried out in addition to the existing system of monitoring complaints.

The additional monitoring and spot checks will be carried out by existing Ofcom staff therefore there will not be any additional cost to Ofcom.

To have regular formal returns collected and checked by Ofcom

Regular formal returns collected and checked by Ofcom would achieve the same goals as a format and localness file, spot checks and self monitoring.

However, having regard to the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed (as we are required to do under section 3(3) of the Communications Act), we do not consider that this option would be appropriate. It would be inconsistent with Ofcom's regulation of television output, which is moving away from a "box ticking" system. It would also be labour intensive and expensive, and would not be in line with Ofcom's principles to operate with a bias against intervention and always to seek the least intrusive regulatory mechanisms to achieve its policy objectives