

Advertisement of a national radio Additional Services licence

<u>Advertisement of a national radio Additional Services licence</u> – Welsh overview

CONSULTATION:

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1. Overview

What we are proposing - in brief

The Additional Services licence can be used to broadcast data services. The current Additional Services licence, which uses spare capacity on the frequencies used to broadcast the national radio service Classic FM, is due to expire on 28 February 2022.

We intend to advertise a new Additional Services licence to begin after the expiry of the current licence. Before inviting applications for that licence, Ofcom must consult on a number of factors that will determine some of the characteristics of the licence.

This consultation sets out our proposals in respect of those factors. We are proposing to issue the new licence for a period of nine years and two months; we propose to make available the same capacity as is available for the current licence; and we propose to set the annual charge for the licence (the 'percentage of qualifying revenue', or PQR) at 4%, the same as it is currently. We invite stakeholders to submit their views on our proposals.

- 1.1 An Additional Services Licence is a licence granted by Ofcom for the use of spare capacity on frequencies used for sound broadcasting services. Ofcom only issues one Additional Service Licence. Currently, this licence is held by INRIX UK Ltd and the uses spare capacity from the frequencies used to broadcast Classic FM to transmit traffic and road travel information to in-car navigation devices. The current licence is due to expire on 28 February 2022.
- 1.2 We intend to advertise a new Additional Services licence to begin after the expiry of the current licence. Before inviting applications for that licence, Ofcom must consult on a number of factors that will determine some of the characteristics of the licence. This consultation sets out our proposals in respect of the duration of the licence (section 3), amount of spare capacity available for the provision of the Additional Service under the proposed licence (see this section and Annex 4), and the level of the payment to be made by the new licence holder based on a specified Percentage of Qualifying Revenue ("PQR") (section 5).
- 1.3 Regarding the duration of the licence, we are proposing that the duration should be nine years and two months, with the licence ending no later than the expiry of the new Classic FM licence, in April 2030. We are also proposing to make available the same amount of capacity as the existing licence, the technical specification for which is set out in Annex 5. With regard to the PQR, we are proposing to set the PQR at 4%.
- 1.4 We have set out in this document the factors that we have taken into account in considering the different options in those matters. We have sought to assess their likely impact and, where appropriate, we invite views on what would constitute an appropriate approach for Ofcom to take.
- 1.5 This consultation also sets out the process we propose to follow in awarding the licence.

 This consultation ask questions and invites comments. We invite respondents to comment

- further, if they wish to do so, on the impact of our proposals when responding to this consultation so that we can take their comments into account in reaching our decisions.
- 1.6 Later this year, we will advertise the proposed new licence. This will, amongst other things, invite cash bids from applicants. We will then, on receipt of applications and bids, apply two thresholds.
- 1.7 We can only consider an applicant's cash bid where it appears to us to meet these thresholds. Of those applicants who meet them, the primary criterion for awarding the licence is that Ofcom shall award it to the highest cash bidder (and there are provisions for settling cases where there are identical bids, primarily by seeking further bids).
- 1.8 If there is only one bidder for the licence, and Ofcom were able to award the licence to that bidder, or only one bidder to whom we could make the award, we would do so.
- 1.9 If, however, there is more than one eligible bidder for the licence we will consider whether there appear to us to be exceptional circumstances that make it appropriate for us to award the licence to a bidder other than the highest bidder. In doing so, we are likely to:
 - publish details of the bidders and their cash bids, including their amounts;
 - invite submissions from bidders and any other interested parties about why and how Ofcom should, or should not, exercise our discretion to award the licence to a bidder other than the highest cash bidder; and
 - publish those submissions and invite responses.
- 1.10 In deciding whether exceptional circumstances exist which would make it appropriate for Ofcom to award the licence to a bidder who did not submit the highest cash bid, we would consider our statutory duties and all the relevant evidence.

2. Background and legal framework

Additional Services licence

- An Additional Services Licence is a licence granted by Ofcom for the use of spare capacity on frequencies used for sound broadcasting services. Ofcom identifies spare capacity on these services by determining how much capacity is required by the existing sound broadcasting service licence holder, and calculating what remains of the total capacity. This spare capacity can be used for broadcasting 'additional services' such as the transmission of data.
- 2.2 Ofcom only issues one Additional Service Licence. Currently, this licence is held by INRIX UK Ltd and the uses spare capacity from the frequencies used to broadcast the FM national radio service under licence INR1, which is held by Classic FM Ltd.¹ INRIX UK Ltd use this spare capacity to transmit traffic and road travel information to in-car navigation devices. The current licence is due to expire on 28 February 2022.
- 2.3 Any arrangements between the Additional Service licensee, the Classic FM licensee, and any other transmission provider, are separate commercial arrangements between those parties, though are in part regulated by statute and licence conditions. This would not change under any new Additional Services licence.

Status of this document and impact assessment

- 2.4 This document sets out the relevant statutory framework. It explains that the licence may not, under the current legal framework, be any longer than nine years and two months because it is inextricably linked to the Classic FM sound service, and to the licence for that service which will expire in April 2031 at the latest (see also section 3 below). It also explains the process Ofcom will follow in inviting applications for the proposed licence, considering cash bids and deciding whether, and if so, how to exercise its discretion in exceptional circumstances to award the licence to a bidder other than the highest cash bidder (section 5 below).
- 2.5 We intend to publish our statement to this consultation, setting out our decisions on the matters on which we are consulting, and the advertisement for the proposed new licence in the fourth quarter of 2021. Our aim is that the new licence should be awarded in early 2022.
- 2.6 This consultation sets out our proposals in respect of the following aspects of the proposed new Additional Services licence:
 - the duration of the licence (section 3);

¹ 'INR' stands for Independent National Radio, and the holders of national sound broadcasting services licences are sometimes known as 'INR licensees'.

- the determination of the amount of spare capacity available for the provision of the Additional Service under the proposed licence (see this section and Annex 4); and
- the level of the payment to be made by the new licence holder based on a specified Percentage of Qualifying Revenue ("PQR") (section 5).
- 2.7 We have set out in this document the factors that we have taken into account in considering the different options in those matters. We have sought to assess their likely impact and, where appropriate, we invite views on what would constitute an appropriate approach for Ofcom to take. The parts of this document relating to those matters therefore constitute our impact assessment (under section 7 of the Communications Act).
- 2.8 We invite respondents to comment further, if they wish to do so, on the impact of our proposals when responding to this consultation so that we can take their comments into account in reaching our decisions.

Impact assessment

2.9 Under section 7 of the Communications Act 2003 Ofcom has a legal duty to carry out impact assessments where our policy decisions are likely to have a significant effect on businesses or the public, or where there is a major change in Ofcom's activities. The analysis set out in this document constitutes such an impact assessment for the purposes of the relevant duties imposed on Ofcom.

Equality Impact Assessment

- 2.10 Section 149 of the Equality Act 2010 (the "2010 Act") imposes a duty on Ofcom, when carrying out its functions, to have due regard to the need to eliminate discrimination, harassment, victimisation and other prohibited conduct related to the following protected characteristics: age; disability; gender reassignment; marriage and civil partnership; pregnancy and maternity; race; religion or belief; sex and sexual orientation. The 2010 Act also requires Ofcom to have due regard to the need to advance equality of opportunity and foster good relations between persons who share specified protected characteristics and persons who do not.
- 2.11 Section 75 of the Northern Ireland Act 1998 (the "1998 Act") also imposes a duty on Ofcom, when carrying out its functions relating to Northern Ireland, to have due regard to the need to promote equality of opportunity and regard to the desirability of promoting good relations across a range of categories outlined in the 1998 Act. Ofcom's Revised Northern Ireland Equality Scheme explains how we comply with our statutory duties under the 1998 Act.
- 2.12 To help us comply with our duties under the 2010 Act and the 1998 Act, we assess the impact of our proposals on persons sharing protected characteristics and in particular whether they may discriminate against such persons or impact on equality of opportunity or good relations.

2.13 We do not consider that our proposals have equality implications under the 2010 Act or the 1998 Act.

Legal framework

Ofcom's General Duties

- Ofcom's principal general duty, when carrying out our radio functions, is set out in section 3(1) of the 2003 Act. It is to further the interests of citizens all members of the public in the UK in relation to communications matters; and to further the interests of consumers in relevant markets, where appropriate by promoting competition.
- 2.15 To meet this duty, Ofcom is required to secure (amongst other things):
 - the optimal use for wireless telegraphy of the electro-magnetic spectrum;
 - the availability throughout the UK of a wide range of television and radio services which (taken as a whole) are both of high quality and calculated to appeal to a variety of tastes and interests; and
 - the maintenance of a sufficient plurality of providers of different television and radio services.
- 2.16 Ofcom must also take into account in relevant cases, amongst other things:
 - the desirability of promoting competition in relevant markets;
 - the desirability of encouraging investment and innovation in relevant markets;
 - the desirability of encouraging the availability and use of high speed data transfer services throughout the United Kingdom;
 - 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; and
 - the opinions of consumers in relevant markets and of members of the public generally.
- 2.17 More specific duties are contained in the 1990 Act. Amongst these is that in section 115(1). This says we must do all we can to secure that, in the case of each relevant frequency, all of the spare capacity available for the provision of Additional Services on that frequency is used for the provision of such services under Additional Services licences.
- 2.18 We consider that, in the present case, fulfilling Ofcom's general duty under section 3 of the 2003 Act, in particular by securing optimal use of the spectrum, and our duty to do all we can to secure that spare capacity within a relevant frequency is used for Additional Services, can be achieved through the award of the licence through the mechanism described in section 6.

The regulatory regime for Additional Service Licences

2.19 One of Ofcom's functions is the licensing of additional radio services, see section 85 of the 1990 Act. This includes advertising, awarding and granting those licences, for instance, as set out in sections 100 and 114 - 118 of the 1990 Act.

- 2.20 An Additional Service is defined under section 114 as any service which consists in the sending of electronic signals for transmission by wireless telegraphy by means of the use of the spare capacity within the signals carrying any sound broadcasting service provided on a relevant frequency. Spare capacity refers to any part of the signal which is not required for the purposes of the sound broadcasting service, and which has been determined as spare capacity by Ofcom. In determining spare capacity, Ofcom must take into account that the provider of the national radio service (in this case, Classic FM) may wish to use part of the capacity to provide services which are ancillary to its programme services. Section 114 also provides for Ofcom to change, but not reduce, the amount of spare capacity determined to be available in respect of a particular Additional Services licence.
- 2.21 Every licence to provide a national sound service shall include conditions which Ofcom think are appropriate for ensuring that an the person holding an Additional Services license is able to access the facilities that are reasonably required in order to provide the Additional Service (see section 115).
- 2.22 Section 118 of the 1990 Act deals with financial payments an Additional Services licensee must make. It says the licence must include conditions requiring annual payment of his cash bid sum (increased by an appropriate percentage each year) and an amount representing the percentage of the qualifying revenue specified in the advertisement of the licence. It also provides for the composition of the qualifying revenue for any accounting period: all amounts which are received or to be received by the licensee or by any connected person and are referable to the right under the licence to use, or to authorise any other person to use, the spare capacity allocated by the licence.
- 2.23 The procedure Ofcom must follow in connection with the consideration of applications for, and awarding of, Additional Services licences is set out under section 117 of the 1990 Act. Section 100 also applies with regards to Additional Services licences awarded by auction. This process is set out in greater detail in section 6 of this document.
- 2.24 Section 118 of the 1990 Act deals with financial payments an Additional Services licensee must make. It says the licence must include conditions requiring annual payment of his cash bid sum (increased by an appropriate percentage each year) and an amount representing the percentage of the qualifying revenue specified in the advertisement of the licence. It also provides for the composition of the qualifying revenue for any accounting period: all amounts which are received or to be received by the licensee or by any connected person and are referable to the right under the licence to use, or to authorise any other person to use, the spare capacity allocated by the licence.
- 2.25 Finally, for present purposes, also relevant are the provisions of the 1990 Act relating to the duration of the Additional Services licences. In particular, sections 97A, and 97B:
 - section 97A says the Secretary of State may nominate a date for digital switchover a
 date after which it will cease to be appropriate for a service to continue to be provided
 in analogue form for licences granted after 8 April 2010, including the new Additional
 Services licence proposed here; and

- section 97B provides that, where the Secretary of State nominates a switchover date,
 Ofcom must vary relevant licences so they end before that date (as long as this, in effect, gives licensees two years' notice of the end of the licence).
- 2.26 Section 105A provides for the possible termination of certain renewed sound broadcasting licences, including (if it is renewed) that under which Classic FM is broadcast, if digital switchover does not occur (either because no switchover date is nominated, or a nominated date is withdrawn and not replaced). In those circumstances, the Secretary of State may give notice to Ofcom fixing a termination date a date after 31 December 2015 in relation to specified services (provided under certain renewed licences), including potentially Classic FM. Ofcom would then have to amend the duration of all relevant renewed licences that would otherwise end after the specified termination date, so they end on or before it (again provided that, in effect, we give relevant licensees two years' notice of the end of their licences). This is relevant for reasons explained in section 3 below.

Relevant frequency and spare capacity

- 2.27 As part of the licensing process, Ofcom is required to advertise a notice setting out details about the licence. Before publishing that notice, Ofcom is required to determine and specify in the advertisement a number of aspects of the Additional Services licence. These are:
 - the sound broadcasting service or services on whose frequency or frequencies the services are to be provided; and
 - the extent and nature of the spare capacity: the capacity within the signals carrying the sound broadcasting service on a relevant frequency and which is available for the provision of Additional Services.
- 2.28 These are linked to the issues of the expiry date of the existing Additional Services licence and the possibility of the continuity of a service provided under an Additional Services licence.
- 2.29 In considering these issues we have borne in mind three of our main general duties in performing our radio licensing function: promoting the interests of consumers in relevant markets; our duty to make optimal use of the spectrum; and our duty relating to the use of spare capacity within relevant frequencies.

Approach to licence award

- 2.30 With regard to the forthcoming Additional Licence advertisement, the manner in which this is conducted is set out in part in section 116 of the Broadcasting Act 1990. See also section 6 of this document for further matters in relation to the mechanism for licence award.
- 2.31 In particular, section 116 of the Act deals with the advertising of, and application for, Additional Services licences. Sub-section (1) requires Ofcom to publish a notice of any proposal to grant a new Additional Services licence including, amongst other things:

- the period for which the licence is to be granted;
- the sound broadcasting service or services on whose frequency or frequencies the services are to be provided;
- the extent and nature of the spare capacity which is to be allocated by the licence; and
- the percentage of qualifying revenue for each accounting period that would be payable by an applicant in pursuance of section 118(1)(c) if it was granted the licence.
- 2.32 Section 116 (3) requires that any application for an Additional Services licence must be in writing and accompanied by (amongst other things) a technical plan indicating the nature of any Additional Services the applicant proposes to provide, its cash bid and such information as Ofcom reasonably require about the applicant's present and projected future financial position.
- 2.33 The following sections of this document address the issues that need to be considered in the lead up to the advertisement of the proposed new licence:
 - the duration of the new licence;
 - the amount of spare capacity available; and
 - the level of payment to be made by the new licence holder.

3. Additional Services licence: duration

Whether the new licence should have a shorter duration than the maximum possible

- 3.1 Under the 1990 Act, an Additional Services licence can be granted for a period of up to twelve years. The advertisement of a new Additional Services Licence must set out the proposed duration of the licence. A bidder would need to know the duration of the licence, amongst other things, to determine its value to that bidder and therefore how much it should bid. We therefore have a decision to make as to the duration of the new licence. In order to do this, we need to develop an analysis of the different options.
- 3.2 Our analysis is set out below. The proposal it leads us to is that the duration of the new Additional Services licence should be for nine years and two months, so that it expires at the same time as the national FM commercial radio licence INR1, currently held by Classic FM Ltd, will expire.
- 3.3 The particular provisions of the 1990 Act relating to the duration of the Additional Services licences are, sections 86(3), 97A, and 97B:
 - section 86(3) says an Additional Services licence must specify a period of no more than twelve years as the period for which it is to be in force;
 - section 97A says the Secretary of State may nominate a date for digital switchover a
 date after which it will cease to be appropriate for a service to continue to be provided
 in analogue form for licences granted after 8 April 2010, including the new Additional
 Services licence proposed here; and
 - section 97B provides that, where the Secretary of State nominates a switchover date,
 Ofcom must vary relevant licences so they end before that date (as long as this, in effect, gives licensees two years' notice of the end of the licence).
- Ofcom recently set the financial terms for the renewal of each of the INR licences; Classic FM accepted these terms, and its licence has been renewed for ten years from 1 May 2021, and subject to the termination provisions now in sections 97A, 97B and 105A of the 1990 Act.

Analysis

3.5 The new licence would be for the provision of an Additional Service using the spare capacity in the signals on the frequencies on which the Classic FM sound service would be broadcast under licence INR1. This relationship with the service provided under licence INR1 limits the duration for which Ofcom could license any new Additional Service.

- 3.6 The renewed licence INR1 will run for ten years from 1 May 2021. We consider that the new Additional Services Licence cannot end on a date that is later than the current INR1 licence, namely 30 April 2031.²
- 3.7 Ofcom considers that an Additional Service (and its licence) is inextricably linked to the sound service on whose frequency it is carried (and its licence). An Additional Service (and an Additional Services licence) can only exist where there is a sound broadcasting service on a relevant frequency (and a licence for it). The former depends on the latter, and must end if the latter ends. Accordingly, the new Additional Service could be licensed for a maximum of nine years and two months (running from 1 March 2022 until 30 April 2031 when the renewed INR1 licence will expire).³
- 3.8 Also relevant are the provisions of sections 97A, 97B and 105A of the 1990 Act referred to above. These could have the effect of bringing to an end, effectively on two years' notice, both the renewed licence INR1, and the new Additional Services licence, earlier than they would otherwise expire. This would occur either because both are terminated under sections 97A and 97B in connection with digital switchover (or at least licence INR1 is), or because the renewed INR1 is terminated under section 105A in the event no switchover date is set, and that in turn means the linked Additional Services licence must end.⁴
- 3.9 What these provisions⁵ mean is that, in practice, the new Additional Services licence could run for less than the maximum period of nine years and two months, notwithstanding that it is granted for that period. A question that remains for Ofcom is whether the new licence should in fact be granted for a shorter period. In December 2016 Ofcom consulted on matters surrounding the advertisement of the last Additional Licences award and this included the duration of a new licence. Among the reasons against the option to reduce the duration of the licence any further, as set out in the 2016 consultation, were:
 - a licensee is likely to want the longest possible licence term available; and
 - we recognise that, in an auction situation, the longer the licence, the more bidders there are likely to be for it, and the more they might be prepared to bid.

² Reading relevant provisions of the 1990 Act² in the light of the High Court's 2010 judgment in the case of *Data Broadcasting International Limited (1) Simpleactive Limited (2) v Office of Communications* (Ofcom) [2010] EWHC 1243, the new Additional Services cannot end at a date later that the current INR1 licence.

³ We have noted that during the passage of the Digital Economy Act, the Government said in the Lords, ".... As the digital radio switchover proposes to move all national radio stations to digital-only, the future of the infrastructure, which these traffic services rely on for carriage, is uncertain. That does not necessarily mean that these services cannot continue on FM. The Government accept that there is a case for allowing the additional service licences, under which these traffic services are licensed, to continue on analogue after the switchover; not least because it would provide continuity of service for motorists ..." It appears to Ofcom that the continued provision of an Additional Service using analogue signals after the switchover to digital of the host sound broadcasting service would require a change in the law, which is a matter for Parliament, not Ofcom.

⁴ Similarly relevant, and for similar reasons, are provisions such as section 111 of the 1990 Act about the revocation of radio licences, and any other provision that might result in the termination of a sound broadcasting licence before its expiry date. Given the links between INR1 and the Additional Services licence, a revocation of the former under section 111 would also result in the latter coming to an end.

⁵ and others like those referred to in the footnote immediately above.

- 3.10 We do not consider that the circumstances have changed significantly since January 2017 (the closure of the 2016 consultation). Therefore, subject to responses and evidence to this consultation, Ofcom is minded not to shorten the duration of this licence and that it should run for nine years and two months.
- 3.11 We invite stakeholders and other interested parties to offer any such views, including evidence as to what the ramifications would be, especially in the context of the possibility of a digital switchover for radio services and of the annual additional payments the licensee would be required to make (see Section 4).

Question 1: Should the duration of the Additional Services licence be shorter than the nine years and two months years proposed? If so, please comment on how long you consider it should be and explain why that is the case, providing any evidence you might have to support your analysis.

4. Additional Services licence: capacity

The determination of the amount of spare capacity available for the provision of the Additional Service under the proposed licence.

- 4.1 This licence permits the licensee to use the 'spare capacity' within the signals carrying the sound broadcasting service Classic FM. This 'spare capacity' is found within the RDS sub carrier of this service see Annex 5.
- 4.2 Ofcom may determine the amount of spare capacity available for provision of the Additional Services licence. Any such determination is carried out under prevailing legislation.

Ofcom's functions and powers

- 4.3 Ofcom may determine the spare capacity available for providing an Additional Service under Section 114 of the 1990 Act.
- 4.4 In making that determination in relation to a relevant frequency on which a national sound service, like Classic FM, is provided, Ofcom must consider any need of the national service provider to be able to use part of the signals to provide services which are ancillary to its programme services. Section 114 also provides for Ofcom to change, but not reduce, the amount of spare capacity determined to be available in respect of a particular Additional Services licence.

Analysis

- 4.5 It appears to us that a determination that at least the same capacity as is currently available for Additional Services on the frequencies used to broadcast Classic FM would be appropriate for the reasons set out below. We reached the same conclusion when we considered this issue last time following our <u>December 2016 consultation</u> when we noted that such a determination would have a positive impact consistent with Ofcom's main and general duties in performing our radio licensing functions as set out earlier in Section 2.
- 4.6 The availability of that data capacity enables the current licensee, INRIX Ltd, to provide a valuable service to consumers, using all the spare data capacity available to it. This is evidenced by the number of users of that service (some 4.5 million), generating revenues for INRIX UK Ltd. Further, it appears to us that a similar service may not be capable of provision using a smaller amount of data capacity (a reduction in the capacity would result in a lowering of the repetition rate, which would in turn mean a reduction in the amount and quality of data that could be transmitted), though, of course, the capacity is by no means bound to be used to provide a similar service. As a result, the availability of a smaller amount of data capacity would have a less positive impact which would be less consistent with our principal duty and that of securing the use of relevant spare capacity.

- 4.7 In determining the amount of spare capacity available on the relevant frequencies we must have regard to any need of the Classic FM licence holder, Classic FM Ltd, to be able to use part of the signals carrying its service for providing services which are ancillary to programmes included in its service. Ofcom's preliminary discussions with This Is Global Limited, the parent company of Classic FM, suggest that the same amount of spare capacity will be available on the relevant frequencies.
- 4.8 In the light of this we consider that:
 - we should advertise and in due course award and grant a new Additional Services licence to use spare capacity within Classic FM's allocated frequencies used to broadcast the Classic FM sound broadcasting service under licence INR1; and
 - the extent and nature of the spare capacity available to provide Additional Services should be the same as that available under the current Additional Services licence.

Question 2: Do you agree with Ofcom's proposed determination of the spare capacity that would be available for the provision of the Additional Service under the proposed new licence?

5. Additional Services licence: percentage of qualifying revenue

Percentage of qualifying revenue

- 5.1 The holder of an Additional Services licence is required, under section 118 of the 1990 Act, to make a payment each year to reflect its cash bid in the auction (which is increased annually by RPI) and an additional payment based on a Percentage of Qualifying Revenue ("PQR") determined by Ofcom (and which may be nil). These payments go to HM Treasury.
- 5.2 When advertising an Additional Services licence we are required to specify what PQR will be payable in respect of the licence.
- 5.3 In this section we consider how the level of the PQR in the present case could affect the level of cash bids and so the outcome of the auction process. The discussion below sets out the pros and cons of different levels of PQR and we seek views on these.
- 5.4 We are consulting on two main options:
 - setting a PQR of zero; and
 - retaining a 4% PQR as used for the current Additional Services licence.

Relationship between auction bids and PQR payments

- 5.5 In discussing the interaction between the PQR rate and auction outcomes it is useful to distinguish between the gross profit and the net profit from holding the licence:
 - Gross profit: profit after PQR payments have been subtracted
 - Net profit: profit after PQR payments and the cash bid have been subtracted
- Abstracting from the specific annual payment structure, we consider that the maximum cash bid a firm would be willing to put forward is equal to the gross profit it expects to make from holding the licence i.e. the amount that in the limit would drive net profits to zero. Different levels of the PQR will obviously have an impact on the level of gross profits, affecting the levels of the maximum cash bids and this in turn should have an impact on the levels of the cash bids in the auction. For instance, a higher PQR would mean a firm would earn less gross profit: the PQR payment represents a cost like any other that must be paid out of revenues. As the gross profit will affect the value of holding the licence we can expect that the cash bids will be reduced in response to the higher PQR.
- 5.7 This can be illustrated with a simple numerical example. Consider a firm that expects to earn £10 million in qualifying revenue per year from holding the licence and has a cost base of £5m before any PQR or cash payments are made. If the PQR is 0% the firm's gross profit / maximum cash bid would be £5 million. If the PQR is increased to 25% the firm's gross profit / maximum cash bid falls to £2.5 million. Clearly any cash bid in the auction

- above £2.5 million, which would be feasible for the firm with PQR at zero, would lead it to make negative net profits with a 25% PQR and the firm would prefer to lose the auction.
- Any firm seeking to acquire the licence will need to make an overall assessment of the scale and timing of future costs and revenues as part of drawing up a business plan and as indicated above the PQR payment would simply represent a cost. As the above numerical example illustrates, we expect different levels of the PQR to be met with an adjustment to cash bids. Therefore, the total amount of payments by the licensee (i.e. cash bid plus additional payments) could well be the same or similar. Also, the identity of the winner of the auction could remain unchanged. However, as we discuss below, neither of these outcomes may be the case if there are substantial differences between bidders.

Issues identified

- As set out above, one effect of a positive PQR would be a shift in payments from cash bids to PQR payments. However, there may be a number of reasons why the level of the PQR may do more than alter the relative size of the two payments. This may affect the actual outcome of the award process (including the identity of the winner and the revenues generated) and the behaviour of the winner after the licence has been awarded.
- 5.10 We have identified a number of issues which are explored in more detail below:
 - If the level of the PQR is too high, the licence could become unprofitable (because the cash bid could not be adjusted to be less than zero) and there may be no bidders
 - A PQR greater than zero will give an advantage to firms with a low revenue/low cost business model compared to rivals with high revenue/high cost business model
 - A PQR greater than zero allows risk-sharing with respect to revenue fluctuations, which may affect different bidders differently
 - A non-zero PQR could affect the efficient allocation of the licence as part of this award process, especially if the auction is not very competitive
 - A non-zero PQR may distort the behaviour of the winning bidder during the licence period in an adverse way

Level of PQR too high

5.11 Because the additional payment is based on revenue rather than profit, a high PQR risks rendering the licence unprofitable since, even with a zero cash bid, anticipated net profits could be negative (even though it may have been profitable with a zero PQR). In an extreme case no firms would enter the auction even though some firms could profitably make use of the licence. The risk of this occurring suggests PQRs should be set cautiously, particularly where there is less certainty ahead of the auction as to who might participate.

Bias towards low-revenue business models

5.12 A positive PQR should in theory provide an advantage to those firms that pursue business models combining low revenues with low costs compared to those with similar levels of

profitability achieved through high costs and high revenues. The absolute value of the PQR payments is larger for firms with high revenues and they will need to make a larger adjustment to their cash bid to ensure the anticipated net profits from holding the licence remain positive. This means their cash bid may fall below those of firms with low revenue business models, who will need to make smaller adjustments to their cash bid, even if the high revenue-high cost firm would have won an auction with a zero PQR.

- 5.13 This can be illustrated with a simple (and highly stylised) numerical example. Consider two bidders for a licence that only lasts for one year:
 - Firm A (high revenue/costs) expects to achieve revenues of £12 million and costs of £6
 million
 - Firm B (low revenue/costs) expects to earn revenues of only £8 million but with costs of £3 million.
- 5.14 With a zero PQR the gross profit / maximum cash bid of Firm A is £6 million and for Firm B £5 million. Suppose initially that the auction bids reflect the ranking of these maximum bids and Firm A wins the auction. Now imagine a PQR of 50% is imposed. This is not necessarily realistic but serves to illustrate the effect. The gross profit / maximum bid of Firm A is now zero (i.e. revenues of £12 million less £6m in PQR payments less £6 million in costs) whereas for Firm B it is £1 million (i.e. £8 million in revenue less £4m in PQR payments less £3 million in costs). Now Firm B can be expected to win the licence.
- 5.15 In practice, this effect, namely that the level of the PQR risks affecting the winner of the auction because of a bias towards low revenue business models, is unlikely to be large for lower PQR rates (such as the 4% under the current Additional Services licence) or when firms differ less dramatically in their cost and revenue structures. Nevertheless, it suggests another reason for setting a zero, or at least a low (4%) PQR rate in the present case.

Risk sharing affecting bids

- A non-zero PQR involves an element of 'risk sharing' in terms of expected revenue that affects bids. If total payments (i.e. cash bids plus PQRs) are weighted towards PQRs, the absolute size of licence payments will vary more in response to revenue fluctuations and this helps to dampen down the impact of demand shocks.⁶
- 5.17 If the additional payments comprised only a cash bid there is no adjustment in response to changes in market conditions and the firm will be exposed to the full effect. That is, the firm would bear the full risk of changes in expected revenue.
- 5.18 If, at the other extreme, only a PQR is payable, a halving of revenues, say, would be partially offset in its impact on the licensee's net profit by a halving of licence payments. In effect the size of licence payments adjusts in response to market conditions.

⁶ This effect will be greatest when a large proportion of costs are fixed, and so do not adjust in response to demand conditions.

- 5.19 Some auction participants may value this particular aspect of a positive PQR. If a firm or its investors dislike exposure to uncertainty, they may be in a stronger position in the auction if there is a positive PQR. In this situation the positive PQR would increase the value firms place on the licence and may therefore encourage them to participate in the auction. This could mean some firms bid who would otherwise be deterred by revenue risk. This may be particularly the case for newer firms seeking to provide innovative services or adopt innovative business models.
- 5.20 However, it may not necessarily be efficient for such a bidder to obtain the Additional Services licence. This may not necessarily result in the best allocation of spectrum. The allocation of spectrum might be better if the PQR were zero and all bidders bear the revenue risks involved with their plans, and the uncertainty is reflected in the value of their bids. In general, we consider that bidders (and capital markets) are better placed to evaluate such risks and reflect those risks in their bids, compared to if Ofcom were to predetermine how the risks should be shared. We would welcome comments on whether there are particular reasons for considering that the risk sharing aspect of a positive PQR would have any advantages in this case.

Efficiency of the award process

No auction design is perfect and different features of an auction imply different risks, depending on the circumstances. In this case, one of the risks is that the bidder with the highest valuation will not actually win. This is because the auction design (which is prescribed in the Broadcasting Act) involves a single round of bids and the price paid for the cash bid element of the licence payments is set equal to the highest bid (known as a 'first price' or 'pay as bid' auction⁸). Firms will want to avoid paying more than they need to for the licence and in this auction that depends on its own auction bid. The bidding incentives, therefore, are for bidders not to make their maximum cash bids (reflecting their full valuation of the licence), but instead to 'shade' their bids below that level.⁹ Ideally, each bidder would like to make the lowest bid that would win the licence. This depends on the bids that other bidders will be making. Bidders therefore have to make difficult judgements about the number of other potential bidders and the bids that they might place. There is a risk that an organisation bids lower than other bidders even when it has the highest valuation, because it misjudges how other firms will bid. For example, if a

⁷ We note that there is already an element of risk sharing involved with the auction payments. Rather than a one-off auction payment, there are annual payments (uplifted for inflation). This means that if the firm becomes insolvent, the payments could cease. This is effectively a form of risk sharing, and can be contrasted with the approach Ofcom usually adopts for spectrum auctions, where the whole auction payment is required as an up-front payment, removing any future credit risk. With this auction, we have no choice over the scheduling of the auction payments, as it is prescribed by the Broadcasting Act 1990.

⁸ This contrasts with a 'second price' auction in which the winner does not pay a price equal to the bid it makes, but instead the highest losing bid made by other bidders.

⁹ In shading its bid, the bidder is making a trade-off between: (i) the cost of reducing its chances of winning; and (ii) the benefit of reducing the price it pays if it does win.

- bidder were mistaken in thinking it was the only bidder, it may bid very low and end up losing the auction even though it may have the highest valuation.
- In such an environment, bidders may participate in the auction who are fully aware that they do not place the highest value on the licence but who nevertheless understand that they may still win the auction if other bidders misjudge the extent of competition for the licence. From the perspective of allocating the licence efficiently as part of this award process (that is, to award it to the user that places the most value on it)¹⁰ it would be better if the likelihood of the licence being awarded to such a bidder were reduced since it would only be in the event of a misallocation (in economic terms) that they would be awarded the licence.
- 5.23 There might be a role for a non-zero PQR in mitigating the potential risk of inefficient allocation arising from the pay-as-bid pricing rule described above, because, in some circumstances, it could help encourage the licence to be awarded to the firm that values it most highly. In particular, a non-zero PQR might deter some bidders who have a very low value for spectrum. We discussed earlier that a non-zero PQR has potential disadvantages in terms of the risk of making some business plans unprofitable, and that it tends to favour low revenue/low cost business models over high revenue/high cost business models. However, if these features, even though they are potential disadvantages in other circumstances, were to discourage some low-value bidders (while not putting off higher value bidders), they could be helpful in reducing the risk that such bidders inefficiently won the auction. For example, requiring low-value bidders to make PQR payments could mean that their absolute level of profit remaining after making the PQR payments becomes so low that it is no longer worthwhile for them to proceed with participation in the auction. This is only a potential advantage, however, if the PQR is set sufficiently low that it avoids having the same effect on higher-value bidders.
- 5.24 However, it is not necessarily the case that a non-zero PQR would have a helpful effect in encouraging the licence going to the firm that values the spectrum most highly. In fact, a high PQR might make it more likely that the operator with the highest valuation would lose the auction. This is because, with a high PQR, a firm with high expected revenues will take this into account when determining its bid and will tend to lower its cash bid compared to if there were a zero PQR. In contrast, a firm that has limited plans for using the licence, and hence would generate low revenues, would have correspondingly smaller PQR payments, and hence may not reduce its bid to the same extent.

¹⁰ Auction efficiency is about awarding the licence to the bidder with the highest private valuation. However, since the licence is for an input into downstream services, there is also a question about downstream (or output) efficiency and the benefits to consumers. Generally, spectrum licences being won by the bidder with the highest private valuation will promote benefits to consumers. This is because, in a competitive market, companies that are willing to spend more money in buying the licence will tend to be those that can provide new or better services consumers are willing to pay for, or provide the same services they already provide but in a more cost-effective way, or a combination of the two. But this depends on the market where companies operate being competitive which is why in spectrum auctions we sometimes include features such as competition measures. Also, there are other important aspects to consumers and citizens which may not always be included in the private valuations of companies, or may only be insufficiently so, like for instance the level of coverage in rural areas. This is why we sometimes impose coverage obligations in mobile spectrum auctions.

- 5.25 We would particularly welcome views on whether a non-zero PQR would improve the likely efficiency of the auction.
- 5.26 We do recognise that an applicant must meet certain thresholds before Ofcom can consider whether to award it the licence on the basis of its cash bid. These requirements may help to mitigate the risk that the licence is not awarded to the firm that values it most highly. These require, first, that the applicant's technical plan, so far as it relates to the use of an electronic communications network, appears to Ofcom to contain proposals that are acceptable to us. They also require that the services the applicant proposes to provide under the licence would be capable of being maintained for the period the licence would be in force.
- 5.27 We also note that Ofcom has a discretion under section 100(3) of the 1990 Act to award the proposed licence to an applicant who has not submitted the highest bid if it appears to us that there are exceptional circumstances which make it appropriate to do so, see Section 6 below.

Potential distortion of the behaviour of winning bidder during licence period

5.28 A non-zero PQR could also affect the behaviour of the firm winning the auction during the licence period in a negative way. This is because the firm's costs are affected by how large its revenue is. If, for example, during the licence period the firm is considering expanding its business, such expansion will be less attractive than it would otherwise be if there is a non-zero PQR. The annual PQR payments will rise if the firm is able to expand revenue, tending to make the expansion less attractive. This would not happen if the PQR were zero. This could distort the behaviour of the firm in a way that is inefficient.

Provisional views

- 5.29 The above analysis considered a number of issues around setting the level of the PQR to apply to the Additional Services licence. We summarise these below.
- 5.30 If the level of the PQR is too high, the licence could become unprofitable (because the cash bid could not be adjusted to be less than zero) and there may be no bidders. This tends to support a zero, or at least low, PQR.
- 5.31 A PQR greater than zero gives an advantage to firms with a low revenue/low cost business model compared to rivals with a high revenue/high cost business model. This also tends to support a zero, or at least low, PQR.
- 5.32 A PQR greater than zero allows risk-sharing with respect to revenue fluctuations. This could affect different bidders differently. On balance, our preliminary view is that it would not be efficient to set a non-zero PQR because it allows risk-sharing, but we particularly welcome stakeholders' views on this.

- 5.33 It is possible that a non-zero PQR could affect the efficient allocation of the licence as part of this award process, especially if the auction is not very competitive. But it is not clear whether it would improve or worsen the allocation in the auction. Again, we would particularly welcome views on this.
- 5.34 A PQR greater than zero could distort the behaviour of the winning bidder by providing a disincentive to business expansion (as each additional £1 of revenue increases its licence payment by £1 multiplied by the rate of PQR). This tends to support a zero, or at least low, PQR.
- 5.35 We consider that our analysis does not support a high PQR and it is our current position that, subject to further input through this consultation process, a low or zero PQR would be preferrable.
- 5.36 We also note that the current level of PQR of 4% does appear to have worked reasonably well. There was only one bidder in the auction in 2017. The current licensee, INRIX, has provided useful services to consumers. We are not aware of any problems that have arisen from the current level of PQR.
- 5.37 We are therefore consulting on two options, namely, retaining the currently low level of PQR of 4%, or setting the PQR to zero. We welcome stakeholders' views on what level of PQR should be set in this auction.

Question 3: Do you agree with our analysis regarding the factors to take into account when setting the level of the PQR?

Question 4: At what level should we set the PQR?

6. Additional Services licence: mechanism for licence award

Award mechanism

- 6.1 The rules for awarding the Additional Services licence are set out in section 100 of the 1990 Act. Most relevant amongst them for the purposes of this section of this document are the provisions of section 100(1) and section 100(3).
- 6.2 Section 100(1) sets out what we might call the 'highest cash bidder' rule. It says:

 'Subject to the following provisions of this section, [Ofcom] shall, after considering all the cash bids submitted by the applicants for a national licence, award the licence to the applicant who submitted the highest bid.'
- 6.3 Section 100(3), meanwhile, says:
 - '[Ofcom] may disregard the requirement imposed by subsection (1) and award the licence to an applicant who has not submitted the highest bid if it appears to them that there are exceptional circumstances which make it appropriate for them to award the licence to that applicant; and where it appears to [Ofcom], in the context of the licence, that any circumstances are to be regarded as exceptional circumstances for the purposes of this subsection, those circumstances may be so regarded by them despite the fact that similar circumstances have been so regarded by them in the context of any other licence or licences.'

Highest cash bidder rule and exceptional circumstances

- The primary mechanism by which an Additional Services licence is awarded is by auction to the highest cash bidder. What is also clear, reading the whole of section 100, and in particular, sub-sections 100(1) and (3), is that, as the first stage in the award process, those who wish to obtain the licence have to submit cash bids. Sub-section (3) does not, for example, permit Ofcom to award the licence without having obtained and considered applicants' cash bids.
- 6.5 In addition, section 100(3) gives Ofcom discretion to disregard the highest cash bidder rule and award the licence to an applicant who is not the highest cash bidder where it appears to us there are exceptional circumstances that make it appropriate to do so.
- 6.6 It is not possible for us to set out in advance the circumstances that might amount to 'exceptional circumstances' in the context of the highest cash bidder rule and the award of the proposed Additional Services licence.
- 6.7 In light of the provisions referred to in this section, we propose to adopt the following process for the award of the licence.

Proposed mechanism

- 6.8 We will advertise the proposed new licence in accordance with section 116 of the 1990 Act. This will, amongst other things, invite cash bids from applicants. We will then, on receipt of applications and bids, apply two thresholds.
- 6.9 First, section 117(1)(a) says that, in so far as it involves the use of an electronic communications network, the technical plan proposed by an applicant must be acceptable to us. Second, section 117(1)(b) says the services proposed to be provided under the licence must be capable of being maintained throughout the period the licence would be in force.
- 6.10 We can only consider an applicant's cash bid where it appears to us to meet these thresholds. Of those applicants who meet them, the primary criterion for awarding the licence is that Ofcom shall award it to the highest cash bidder (and there are provisions for settling cases where there are identical bids, primarily by seeking further bids).
- 6.11 If there is only one bidder for the licence, and Ofcom were able to award the licence to that bidder¹¹, or only one bidder to whom we could make the award, we would do so.
- 6.12 If, however, there is more than one eligible bidder for the licence we will consider whether there appear to us to be exceptional circumstances that make it appropriate for us to award the licence to a bidder other than the highest bidder. In doing so, we are likely to:
 - publish details of the bidders and their cash bids, including their amounts;
 - invite submissions from bidders and any other interested parties about why and how
 Ofcom should, or should not, exercise our discretion to award the licence to a bidder other than the highest cash bidder; and
 - publish those submissions and invite responses.
- 6.13 In deciding whether exceptional circumstances exist which would make it appropriate for Ofcom to award the licence to a bidder who did not submit the highest cash bid, we would consider our statutory duties and all the relevant evidence.
- 6.14 We consider that the above reflects the legal position under section 100 (rather than a proposed view on which Ofcom is consulting). This document nonetheless provides stakeholders with an opportunity to comment on the above should they wish to do so.

Question 5: do you have any other comments on the proposals?

¹¹ Taking into account, for example, the two thresholds referred to above, and the rules regarding the fitness and propriety of licensees, the holding of different broadcasting licences (often called the 'ownership' rules) and disqualified persons, all as referred to or set out in the 1990 Act.

A1. Responding to this consultation

How to respond

- A1.1 Ofcom would like to receive views and comments on the issues raised in this document, by 5pm on 6 October 2021.
- A1.2 You can download a response form from https://www.ofcom.org.uk/consultations-and-statements/category-3/additional-services-licence-advertisement. You can return this by email or post to the address provided in the response form.
- A1.3 If your response is a large file, or has supporting charts, tables or other data, please email it to broadcast.licensing@ofcom.org.uk, as an attachment in Microsoft Word format, together with the cover sheet.
- A1.4 We welcome responses in formats other than print, for example an audio recording or a British Sign Language video. To respond in BSL:
 - Send us a recording of you signing your response. This should be no longer than 5 minutes. Suitable file formats are DVDs, wmv or QuickTime files. Or
 - Upload a video of you signing your response directly to YouTube (or another hosting site) and send us the link.
- A1.5 We will publish a transcript of any audio or video responses we receive (unless your response is confidential).
- A1.6 We do not need a paper copy of your response as well as an electronic version. We will acknowledge receipt if your response is submitted via the online web form, but not otherwise.
- A1.7 You do not have to answer all the questions in the consultation if you do not have a view; a short response on just one point is fine. We also welcome joint responses.
- A1.8 It would be helpful if your response could include direct answers to the questions asked in the consultation document. The questions are listed at Annex 4. It would also help if you could explain why you hold your views, and what you think the effect of Ofcom's proposals would be.
- A1.9 If you want to discuss the issues and questions raised in this consultation, please contact Broadcast Licensing and Programme Operations on 020 7981 3002, or by email to broadcast.licensing@ofcom.org.uk.

Confidentiality

A1.10 Consultations are more effective if we publish the responses before the consultation period closes. In particular, this can help people and organisations with limited resources or familiarity with the issues to respond in a more informed way. So, in the interests of transparency and good regulatory practice, and because we believe it is important that

- everyone who is interested in an issue can see other respondents' views, we usually publish all responses on the Ofcom website as soon as we receive them.
- A1.11 If you think your response should be kept confidential, please specify which part(s) this applies to, and explain why. Please send any confidential sections as a separate annex. If you want your name, address, other contact details or job title to remain confidential, please provide them only in the cover sheet, so that we don't have to edit your response.
- A1.12 If someone asks us to keep part or all of a response confidential, we will treat this request seriously and try to respect it. But sometimes we will need to publish all responses, including those that are marked as confidential, in order to meet legal obligations.
- A1.13 Please also note that copyright and all other intellectual property in responses will be assumed to be licensed to Ofcom to use. Ofcom's intellectual property rights are explained further in our Terms of Use.

Next steps

- A1.14 Following this consultation period, Ofcom plans to publish a statement in summer 2021.
- A1.15 If you wish, you can <u>register to receive mail updates</u> alerting you to new Ofcom publications.

Ofcom's consultation processes

- A1.16 Of com aims to make responding to a consultation as easy as possible. For more information, please see our consultation principles in Annex 2.
- A1.17 If you have any comments or suggestions on how we manage our consultations, please email us at consult@ofcom.org.uk. We particularly welcome ideas on how Ofcom could more effectively seek the views of groups or individuals, such as small businesses and residential consumers, who are less likely to give their opinions through a formal consultation.
- A1.18 If you would like to discuss these issues, or Ofcom's consultation processes more generally, please contact the corporation secretary:

Email: corporationsecretary@ofcom.org.uk

A2. Ofcom's consultation principles

Ofcom has seven principles that it follows for every public written consultation:

Before the consultation

A2.1 Wherever possible, we will hold informal talks with people and organisations before announcing a big consultation, to find out whether we are thinking along the right lines. If we do not have enough time to do this, we will hold an open meeting to explain our proposals, shortly after announcing the consultation.

During the consultation

- A2.2 We will be clear about whom we are consulting, why, on what questions and for how long.
- A2.3 We will make the consultation document as short and simple as possible, with a summary of no more than two pages. We will try to make it as easy as possible for people to give us a written response. If the consultation is complicated, we may provide a short Plain English / Cymraeg Clir guide, to help smaller organisations or individuals who would not otherwise be able to spare the time to share their views.
- A2.4 We will consult for up to ten weeks, depending on the potential impact of our proposals.
- A2.5 A person within Ofcom will be in charge of making sure we follow our own guidelines and aim to reach the largest possible number of people and organisations who may be interested in the outcome of our decisions. Ofcom's Consultation Champion is the main person to contact if you have views on the way we run our consultations.
- A2.6 If we are not able to follow any of these seven principles, we will explain why.

After the consultation

A2.7 We think it is important that everyone who is interested in an issue can see other people's views, so we usually publish all the responses on our website as soon as we receive them. After the consultation we will make our decisions and publish a statement explaining what we are going to do, and why, showing how respondents' views helped to shape these decisions.

A3. Consultation coversheet

BASIC DETAILS

Consultation title:		
To (Ofcom contact):		
Name of respondent:		
Representing (self or organisation/s):		
Address (if not received by email):		
CONFIDENTIALITY		
Please tick below what part of your res	sponse yo	ou consider is confidential, giving your reasons why
Nothing		
Name/contact details/job title		
Whole response		
Organisation		
Part of the response		
If there is no separate annex, which parts?		
still publish a reference to the contents	s of your	ryour organisation not to be published, can Ofcom response (including, for any confidential parts, a cific information or enable you to be identified)?
that Ofcom can publish. However, in supublish all responses, including those v	upplying t vhich are by email,	n this cover sheet is a formal consultation response this response, I understand that Ofcom may need to marked as confidential, in order to meet legal. Ofcom can disregard any standard e-mail text about
· ·	•	your response is non-confidential (in whole or in esponse only once the consultation has ended,
Name	Signed	(if hard copy)

A4. Consultation questions

- A4.1 This consultation is seeking views from stakeholders on our proposed framework for advertising the Additional Services licence. Ofcom wants to hear from a broad range of stakeholders through this consultation.
- A4.2 Respondents are asked to provide an answer to every question that they consider relevant but are not required to respond to every question as part of their submission. Ofcom will publish non-confidential responses on its website, but respondents should specify where a response or part of a response is confidential.

Question 1: Should the duration of the Additional Services licence be shorter than the nine years and two months proposed? If so, please comment on how long you consider it should be and explain why that is the case, providing any evidence you might have to support your analysis.

Question 2: Do you agree with Ofcom's proposed determination of the spare capacity that would be available for the provision of the Additional Service under the proposed new licence?

Question 3: Do you agree with our analysis regarding the factors to take into account when setting the level of the PQR?

Question 4: At what level should we set the PQR?

Question 5: do you have any other comments on the proposals?

A5. Technical specification

Available RDS capacity

- A5.1 The Additional Service is to be operated on the RDS sub-carrier conforming to IEC standard 62106:2018/2021 using one or more of only the following allowable features:
 - TDC (Group 5A)
 - Paging (RP) (Group 7A with part of Group 1A)
 - TMC (Group 8A)
 - IH (Group 6A only)
 - ODA (Various allowable Groups: refer to specification)
- A5.2 The group repetition rate available to the Licensee will be, to the extent necessary:
 - an average of 2.4 groups/sec, averaged over any one-minute period
 - a minimum of 1 group in any second
 - 4 groups/sec. for consecutive seconds in every five-minute period in every hour;
 - such parts of the overhead signalling capacity in the RDS bitstream, notably group types 3A, as are necessary for use of the above—referenced Additional Services groups.
- A5.3 No further capacity beyond this is to be made available to the Licensee.
- A5.4 The minimum deviation of the FM carrier due to the modulated RDS subcarrier shall be \pm 2.0 kHz, and the maximum deviation shall be \pm 2.5 kHz.

The overview section in this document is a simplified high-level summary only. The proposals we are consulting on and our reasoning are set out in the full document.