

# Analogue Radio Technical Code

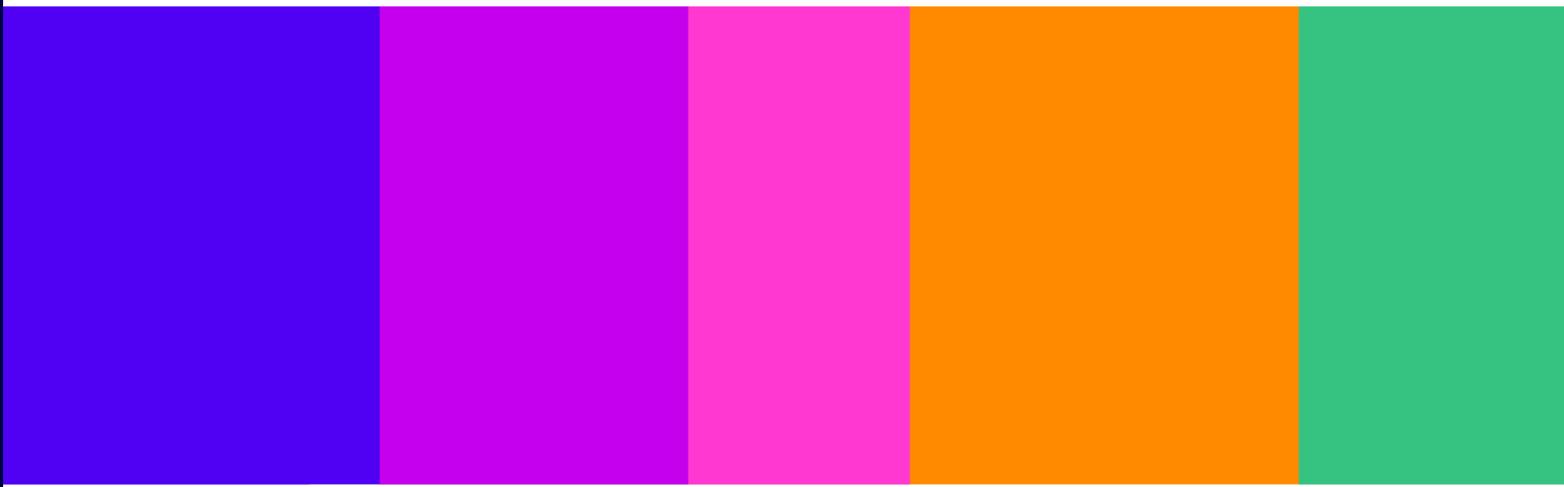
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Consultation on updating the Ofcom Site  
Engineering Code for Analogue Radio  
Broadcast Transmission Systems

## Consultation

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# 1. Overview

- 1.1 Ofcom has specific responsibilities for licensing and regulating TV and radio broadcast services which are transmitted via networks of land-based transmitter masts (i.e. 'terrestrial' broadcast services). These services include analogue radio stations using AM (Amplitude Modulation) and FM (Frequency Modulation) that vary in scale from national services through local, community to very localised restricted services serving a defined establishment such as a hospital.
- 1.2 Analogue radio licensees (including BBC services) are required to comply with the Ofcom Site Engineering Code for Analogue Radio Broadcast Transmission Systems which is based on the provisions set out in the Broadcasting Act 1990, the Broadcasting Act 1996, the Wireless Telegraphy Act 2006 and the Communications Act 2003. This Code applies to all analogue local and national commercial radio services, community radio, BBC radio and restricted services.
- 1.3 The main aim of Ofcom's broadcast technical codes is to ensure that the signals carrying different groups of radio stations do not technically conflict or interfere with one another. Ofcom updates these rules to ensure they remain relevant and proportionate as the analogue broadcasting environment develops, as well as to keep in line with current legislation.
- 1.4 The current version of the Code has been in force since 2013. Ofcom is now proposing a number of updates to the Code as summarised below, and which are described in more detail in this consultation. We have also published a separate document comparing and identifying the specific proposed changes to the Code alongside this consultation.

## **What we are proposing – in brief**

In the updated analogue radio technical code, there are a number of changes we are proposing in order to keep up to date with current legislation and practice, as well as responding to specific stakeholder feedback.

### **Renaming the Code for consistency with the Technical Codes applying to other broadcasting services**

- We are proposing changing the name of the Code from the 'Ofcom Site Engineering Code for Analogue Broadcast Transmission Systems' to the 'Analogue Radio Technical Code' for consistency with the nomenclature used for the other technical codes that apply to digital radio and TV services.

### **Clarification of responsibilities with regards to commissioning and testing of transmitters**

- We propose to align the code wording to be consistent with that included in the Digital Radio Technical Code to make clear that responsibility for commissioning and acceptance of transmitter equipment rests with radio licensees who must arrange for suitably qualified personnel to carry out that work. Licensees will no longer be able to request that Ofcom carries out transmitter acceptance work, which brings the approach in line with other parts of industry.
- To help licensees and their contractors in carrying out transmitter acceptance work, we intend providing a guide to making measurements, as we have previously done for digital radio.

### **Introducing a requirement for analogue radio licensees to consider the resilience of their services**

- We are proposing that analogue radio broadcasters should consider the end-to-end resilience of their services and to have service continuity plans in place in case of failures occurring. Licensees do not need to share these plans with Ofcom or report on them, although they may form part of the evidence that licensees would need to provide to Ofcom if an investigation were initiated into a major service outage.

### **Considering requests for wider AM radio audio bandwidth**

- We are proposing that Ofcom will consider proposals on a case-by-case basis from existing licensees to use a wider audio bandwidth to modulate an AM (medium wave) radio service, where this is technically feasible and will not lead to any significant increase in interference to other spectrum users in the UK or overseas.

### **Other proposed changes**

- We propose to add references in the code to signpost Ofcom's requirements on exposure to electromagnetic fields. These requirements already apply to all relevant spectrum licensees holding Wireless Telegraphy Act licences, and therefore the references in the technical codes will be informative only.
- We are also incorporating a number of editorial changes to make licensees' obligations clearer, and also to update references to standards and national and international legislation.

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.

## 2. Introduction

### Background

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- 2.1 Analogue radio, more usually known as FM and AM radio, has been in operation in the UK for over 100 years. It is a technology used across the UK to deliver national and local commercial radio, as well as community radio, restricted services for events or establishments, and radio services from the BBC.
- 2.2 Ofcom’s duties and responsibilities regarding analogue radio are set out in the Broadcasting Act 1990, the Broadcasting Act 1996, the Wireless Telegraphy Act 2006, and the Communications Act 2003.
- 2.3 Analogue radio transmitters are required to comply with the Ofcom Site Engineering Code for Analogue Broadcast Transmission Systems<sup>1</sup>. This Code is intended to ensure that the UK’s analogue radio services achieve minimum standards of technical quality, availability, and coverage. It also sets standards to prevent undue interference to and from other broadcasters’ services and other spectrum users.
- 2.4 The Site Engineering Code was last revised in 2013. While the Government’s Digital Radio and Audio Review<sup>2</sup> showed a clear direction of travel for radio services moving to digital distribution, it also acknowledged that analogue FM radio was likely to continue for some years into the 2030s. As the Code will remain relevant for some years, Ofcom has carried out a review, and is proposing some changes to ensure that its provisions remain up to date.
- 2.5 One of the changes we are proposing is to rename the Code to the “Analogue Radio Technical Code” for consistency with the technical codes that apply to digital radio and television. We use this terminology or abbreviate its name to “the Code” throughout this consultation document. Where it is necessary to distinguish between Code versions, we refer to the unrevised (current) Ofcom Site Engineering Code for Analogue Broadcast Transmission Systems as “the Site Engineering Code”.
- 2.6 We describe the changes we are proposing in the following sections, and invite feedback from stakeholders on our proposals that we will take into account when finalising the revised Code.

### Draft version of the revised Analogue Radio Technical Code

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- 2.7 Alongside this consultation, we are also publishing a draft version of the revised Analogue Radio Technical Code, and an accompanying document that provides a comparison between the draft revised Code and the current Site Engineering Code.

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<sup>1</sup> [https://www.ofcom.org.uk/data/assets/pdf\\_file/0017/37133/code2013.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0017/37133/code2013.pdf)

<sup>2</sup> <https://www.gov.uk/government/publications/digital-radio-and-audio-review/digital-radio-and-audio-review>

# 3. Scope, Tests and Inspections

## Overview of proposed amendments

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- 3.1 This section contains a description of the changes we are proposing to the Code section dealing with Scope, Tests and Inspections. We have based the structure of this section on the paragraphs as set out in the current version of the Site Engineering Code.

## Scope of Code

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- 3.2 We are proposing to remove the paragraph setting out the Scope of the Site Engineering Code with the aim of simplifying the document as the text in this paragraph is purely descriptive. Consequently, we have removed the word ‘Scope’ from the title of the section which will become ‘Tests and Inspections’ in the revised Code.

## Other responsibilities

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- 3.3 We are proposing to move the ‘Other Responsibilities’ text to the ‘Introduction’ section, so that it is consistent with the layout of the Digital Radio Technical Code. The text has also been made consistent with that included in the Digital Radio Technical Code. Explicit references to general requirements that sit outside Ofcom’s direct regulatory locus such as compliance with current Health and Safety at Work legislation or legal liabilities relating to use of land or buildings have been removed from the proposed text. Licensees will naturally need to continue to comply with all relevant general legislation.

## CE marking

- 3.4 We have removed reference to CE marking and compliance with the R&TTE Directive from the proposed text in the ‘Other Responsibilities’ subsection. The R&TTE Directive had been superseded by the European Radio Equipment Directive, and following the UK’s withdrawal from the European Union, the requirements for putting equipment onto the market and into use in the UK have changed. Formerly, all radio equipment was required to meet EU standards and be marked with “CE” certification, although that was envisaged to be superseded by UKCA mark accreditation. The UK Government subsequently announced in October 2023 that it intends to introduce legislation to extend recognition of goods that meet EU requirements, including the CE marking, indefinitely, beyond 31 December 2024 for many products in England, Scotland and Wales. Some classes of product will however need to carry the UKCA mark after that date. In Northern Ireland, the CE mark will continue to be recognised for all products, and UKCA marked products must also carry a CE mark.
- 3.5 It is important to note that different products have different authorisation expiry dates based on the category they belong to. Licensees are therefore encouraged to satisfy themselves that any equipment they intend using for their broadcast service meets the relevant standards in force at the time. It is advised to stay up to date by referring to the UK Government’s website at: [Using the UKCA marking - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/using-the-ukca-marking).

## Electromagnetic fields

- 3.6 The reference to Electromagnetic fields has been removed from the proposed text of the 'Other Responsibilities' section. A new informative subsection dealing with Electromagnetic Fields has been included in Section 5 of the proposed version of the Code as set out later in this document.

## Commissioning, Tests and Subsequent modifications

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### Background and Current Processes

- 3.7 The Analogue Technical Code requires licensees to demonstrate that their transmitter systems comply with specific technical standards. These 'technical acceptance' checks must be carried out before bringing any new or modified transmitters into service. These apply to most analogue radio services, and we have proposed amended wording to clarify that the requirement to test for compliance with the Code does apply to Restricted Service Licences serving establishments (like hospitals) and not to short-term Restricted Services issued for the purposes of covering an event (like a festival).
- 3.8 The technical acceptance check requirements primarily relate to the spectral characteristics of the radiated AM/FM signals, where (amongst other things) Ofcom sets limits for the strength of out-of-band and spurious emissions. These are relatively weak signals on frequencies above and below the wanted analogue signal and are an inevitable by-product of the normal operation of radio transmitter equipment.
- 3.9 However, if the strength of out-of-band emissions exceeds the permitted limits, there is a risk of causing interference to users in neighbouring parts of the spectrum bands. Licensees must also check that the power of the transmitted signal does not exceed the maximum power level specified in their licence, and ensure that it is being transmitted accurately on the licensed frequency.
- 3.10 It is the responsibility of licensees to carry out these acceptance checks (or to engage a competent contractor to do so on their behalf), and to provide the results of these checks to Ofcom before a transmitter comes into service. Historically, Ofcom's engineering staff have been able to attend sites to witness or carry out acceptance checks in some cases. This may have been at the licensee's request, or where the transmission site had certain characteristics (for example where the site has existing broadcast services present, and where there are specific risks such as intermodulation interference between the existing services). This practice is however inconsistent with the approach we take with other spectrum licensees.

### Ofcom's future approach to site attendance

- 3.11 We propose that licensees will remain responsible for ensuring that their transmitter installations meet the conditions set out in their licences and the Code, and if not able to do so themselves, must engage suitably competent contractors to do so on their behalf. Licensees will no longer be able to request that Ofcom carries out acceptance tests of new or modified transmitter installations. This approach is consistent with that taken by Ofcom in other areas of industry.

- 3.12 Although Ofcom staff have attended acceptance tests for a proportion of analogue transmitter sites to date, going forward we will only attend site where we elect to do so due to a compelling reason to witness tests or to carry out checks. These reasons may include:
- Where an installation is at a multi-user site where intermodulation may be an issue. This could be either where there is another broadcast radio user, or certain other spectrum users already operating from the site;
  - Where there is a new type of transmitter being installed that has not been previously checked for compliance;
  - Where we wish to carry out a check of a sample installation for quality control purposes;
  - Where we have chosen to carry out a reception survey to gather signal level information.
- 3.13 Ofcom will retain discretion to attend site acceptance checks in other circumstances - or to carry out our own technical compliance checks where we deem this necessary. Such onsite visits may be chargeable to the licensee where these are due to inadequacies or ambiguities in the evidence supplied by the licensee.

## Proposal

- 3.14 As Ofcom does not offer to carry out acceptance tests across other sections of industry, we propose to remove this option for analogue broadcast transmitters. In doing so we will make our policy consistent with that in place for digital radio (DAB) where there is a presumption that Ofcom does not attend site unless we have a reason to do so, and where licensees need to provide us with results of their acceptance tests within five days of a transmitter coming on-air.
- 3.15 We have therefore amended the proposed Code wording to remove the option for licensees to request Ofcom to carry out acceptance tests on their behalf. This action follows changes made to the Digital Radio Technical Code in 2022, and our revised wording is consistent with that in the Digital Radio Technical Code.
- 3.16 To ensure consistency, we plan to produce a guide to inform licensees what information we expect from acceptance tests, and to help guide them or their contractors in carrying out the required measurements. We aim to publish this additional guide alongside the updated Analogue Radio Technical Code following this consultation, during the Summer of 2024.

## Documentation

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- 3.17 The proposed wording in this sub-section is largely unchanged other than some minor simplification, and to change the word “commissioning” to “acceptance”.

## Inspections and monitoring

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- 3.18 There are no changes to the wording in this sub-section.

### **Consultation question 1:**

Do you have any observations or comments regarding the proposed changes to Section 2 of the Code dealing with Scope, Tests and Inspection? In particular do you have any

comments on the changes relating to carrying out acceptance testing, and providing information to licensees? Is there anything missing that could make the process smoother?

# 4. Characteristics and Limits of Transmission for FM radio services (87.5 – 108 MHz)

## Overview of proposed amendments

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- 4.1 This section describes the changes we are proposing to make to the section of the Code dealing with FM analogue radio. We have based the structure of this section on the paragraphs as set out in the current version of the Site Engineering Code.
- 4.2 For clarity, we propose to revise the section title from “Characteristics and Limits of Transmission: (VHF: 87.5 – 108 MHz): frequency modulation” to “Characteristics and Limits of Transmission for FM radio services (87.5 – 108 MHz)”

## Transmission standard

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- 4.3 This section is unchanged except to update the reference to ITU-R 450-3 to reflect the current version of the recommendation at the time of writing, which is ITU-R BS.450-4. This update does not change obligations on the licensee or the limits to which they are required to operate their transmitter.

## Spectral occupancy

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- 4.4 This section is unchanged except to update the reference to ITU-R 412-7 to reflect the current version of the recommendation at the time of writing which is ITU-R BS.412-9. This update does not change obligations on the licensee or the limits to which they are required to operate their transmitter.

## Spurious and harmonic emissions

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- 4.5 We have reformatted this section to present the emissions limits in tabular form to improve clarity. There have been no changes to any of the levels that apply. We have also proposed minor edits to the wording of the final two paragraphs to improve clarity.

## Antenna design

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- 4.6 We have proposed to remove some wording to improve clarity. There are no changes to the levels or process that Ofcom will employ in judging compliance.

## Field strengths close to the transmitter site

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- 4.7 The proposed wording in this section is largely unchanged, except to replace the word “protected service area” with “licensed area” which is the correct current term.

## Efficient Implementation of Cleared Transmission Parameters

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- 4.8 We are proposing to update the title of the section to “Transmission parameter implementation and resilience”. The wording carried over from the Site Engineering Code is unchanged in the revised Code. We also propose to add new provisions relating to resilience to this section.
- 4.9 During 2022/2023 Ofcom consulted<sup>3</sup> on making changes to the Technical Codes that apply to Digital Radio and Television services. One of the changes we made was to include a provision to require that digital radio multiplex licensees consider the technical resilience of their services, and to have proportionate service continuity plans in place. The intention is to ensure that licensees consider the technical resilience of their services, including the consequences of a failure of each part of their broadcast transmission chains. While the new requirement would oblige a licensee to have in place a service continuity plan, we made clear that the scale and scope of the plan should be proportionate to the service the licensee is providing.
- 4.10 We are therefore proposing to add a sentence to the Analogue Radio Technical Code which mirrors the requirement placed on Digital Radio multiplex licensees in 2023: *“Licensees should consider the technical resilience of their service, and have service continuity plans in place that are proportionate to the service they are providing”*. We have also added preceding and following paragraphs that provide additional context.
- 4.11 Licensees will not be required to report on their plans or show how they test implementation of those plans, although Ofcom may ask for details and evidence in the course of any investigation that may follow a prolonged failure.

## Transmitter Carrier Frequency

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- 4.12 There are no changes to the wording of this sub-section other than to expand the abbreviation “WT” to “Wireless Telegraphy”.

## Programme material

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- 4.13 There are no proposed changes to this sub-section.

## Supplementary Signals (RDS, Additional Services and Control/Monitoring Functions)

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- 4.14 The proposed wording of this sub-section is largely unchanged and there are no changes on the requirements or obligations on licensees. For clarity we propose to remove a paragraph relating to potential future subcarrier systems, and also propose to remove a reference to an in-house telemetry system that we understand is no longer in use by the BBC.

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<sup>3</sup> <https://www.ofcom.org.uk/consultations-and-statements/category-1/changes-to-digital-television-and-radio-technical-codes>

**Consultation question 2:**

Do you have any observations regarding the proposed changes to Section 3 of the Code dealing with FM transmission?

# 5. Characteristics and Limits of Transmission for AM radio services (531 kHz - 1602 kHz)

## Overview of proposed amendments

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- 5.1 This section describes the changes we are proposing to make to the section of the Code dealing with AM analogue radio. We have based the structure of this section on the paragraphs as set out in the current version of the Site Engineering Code.
- 5.2 For clarity we propose to revise the section title from “Characteristics and Limits of Transmission: (MF: 531kHz to 1602kHz): amplitude modulation” to “Characteristics and Limits of Transmission for AM radio services (531 - 1602 kHz)”

## Transmission standard

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- 5.3 There are no changes to this sub-section other than to spell out EMRP in full as Effective Monopole Radiated Power.

## Spectral Occupancy

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- 5.4 The bulk of wording and the sideband limits remain unchanged, although we are proposing that Ofcom may consider changes to the limits on a case-by-case basis if it agrees with specific existing licensees that they may use a wider audio bandwidth than is standard. Further explanation is set out in the paragraphs 5.7-5.18 dealing with Programme Material below.

## Spurious and harmonic emissions

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- 5.5 There are no changes to the wording of this sub-section other than to expand the abbreviation “WT” to “Wireless Telegraphy”.

## Transmitter carrier frequency

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- 5.6 There are no changes to the wording of this sub-section other than to expand the abbreviation “WT” to “Wireless Telegraphy”.

## Programme material

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- 5.7 The standard requirements and wording relating to audio bandwidth and filtering remain unchanged. In response to stakeholder feedback, Ofcom is considering accepting requests from licensees on a case-by case basis to operate transmitters with signals modulated with a wider audio bandwidth which we describe next.

## Background

- 5.8 The bandwidth occupied by an AM signal is proportional to the audio bandwidth used to modulate it, and the Site Engineering Code restricts the audio signals that can be used by AM broadcasters to the range 0 to 6 kHz (at -3dB point). The reason for this is to control how much spectrum each AM signal occupies, and as a result control the interference that occurs to services in adjacent channels in the UK and overseas.
- 5.9 This approach has been consistent for decades, however, following requests from some stakeholders Ofcom is considering whether to permit licensees to use a wider audio bandwidth.
- 5.10 The Government published its Digital Radio and Audio Review<sup>4</sup> in 2022 which found at that time AM accounted for 3% of radio listening, and for 6% of analogue radio listening. The review found that AM listening has followed a relatively consistent linear decline over the previous ten years. The review concluded that if listening were to follow a similar path in the future, AM listening is likely to fall to commercially unsustainable levels around 2025.
- 5.11 Since the Government's review, Absolute Radio switched off its national AM service in January 2023. Before that, TalkSport set out plans to switch off 17 of its AM transmitters which would reduce coverage of their AM network from 93% to 85% of the UK population. In April 2023 Ofcom approved TalkSport's proposal to switch off the first four of these transmitters, and coverage currently stands at slightly under 90%. Other broadcasters including the BBC have also switched off a number of AM services. Ofcom is not currently planning any further rounds of analogue radio licensing.
- 5.12 Against this backdrop, we have received some requests asking that Ofcom permits remaining AM broadcasters to use a wider audio bandwidth. This could in principle provide better sound quality for listeners. Also, with the number of AM broadcasters in decline in the UK and overseas, increasing the spectral bandwidth that AM services occupy is likely to present less of an interference risk to the reduced number of remaining AM broadcasters than formerly.
- 5.13 When considering whether to proceed with making changes we have to consider the potential benefits and also the costs or downsides of allowing a change. Better sound quality may be valued by listeners if radios are of a sufficient quality to reproduce it, although limited audio bandwidth is only one issue affecting AM radio sound quality, with night-time interference, fading and some electrical appliances also causing problems.
- 5.14 It is not clear how many broadcasters might want to make changes to their AM transmitters or whether changes are feasible given constraints in filtering and the bandwidth of transmitting antennas. We also recognise that AM listening makes up only a small proportion of overall UK radio listening and any further investment in AM transmission may not be attractive (although AM may represent a large proportion of listening for some local, community radio or RSL services whose only broadcast outlet is AM transmission).
- 5.15 Making the changes would also require Ofcom to invest resources to investigate the potential impact on adjacent services in the UK, as well as revisiting international frequency coordination agreements as all of our rights to use spectrum for AM radio assume the current bandwidth restrictions.

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<sup>4</sup> [Digital radio and audio review - GOV.UK \(www.gov.uk\)](https://www.gov.uk/digital-radio-and-audio-review)

## Proposal

- 5.16 As the benefits and potential uptake of a wider audio bandwidth are unclear, and the work to enable it to happen could be significant, Ofcom is not proposing to amend the Code to permit use of wider audio bandwidth.
- 5.17 Instead, Ofcom would like to hear from existing broadcasters who may be interested in switching to using a wider audio bandwidth to help us gauge what interest exists. AM broadcasters wishing to explore the possibility should in the first instance discuss feasibility with their transmission provider or technical contractor. If this discussion is promising, they should respond to this consultation setting out what they wish to do, what changes would be needed to the limits set out in the Code such as the maximum audio frequency and sideband specification. Respondents should also indicate what investment and timescale would be involved in making any change. Any comments which respondents wish to remain confidential can be flagged as such when a response is submitted, and these will not be published by Ofcom.
- 5.18 If the responses to this consultation indicate a sufficient level of demand, we anticipate that we would consider requests to allow a wider AM channel bandwidth on a case-by-case and possibly trial basis, examining the interference and international coordination implications for specific transmitters. The proposed revised Code wording assumes this outcome, although we may remove the additional wording if there appears to be insufficient demand. We would also need to reconsider the position if the level of demand was so great as to make the workload unmanageable in relation to our other planning work.

## Supplementary signals

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- 5.19 There are no changes to the wording of this sub-section.

### **Consultation question 3:**

Do you agree with our proposals for amending the Section 4 dealing with AM transmission?

If you are an existing AM broadcaster that is interested in adopting a wider audio bandwidth, please first discuss feasibility with your transmission service provider. If, following that discussion, you believe making a change is feasible then let us know the following:

- A brief description of what you would like to do regarding audio bandwidth, and what changes would be needed to the Code provisions (permitted audio bandwidth, sideband level etc) to enable the transmitter modification to go ahead. Please also let us know how much it might cost to make the change and what the timescale to implement the change would be.

# 6. Transmitter equipment

## Access to adjustments

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- 6.1 There are no proposed changes to the wording of this sub-section. However in the interests of clarity we propose re-naming the section to “Access to controls and adjustments”.

## Metering and monitoring

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- 6.2 The requirements set out in this section are largely unchanged, although we are proposing to remove the requirement for licensees whose transmitters are the only service feeding an antenna system to incorporate a forward/reverse monitoring point to include a directional coupler. This monitoring point allows RF measurements to be made by Ofcom or by the licensee without interrupting the transmitted service.
- 6.3 The change mirrors a similar relaxation in 2019 of the requirements set out in the Digital Radio Technical Code for DAB transmitters. At the time we brought in that change, we noted that while directional couplers are not excessively costly, they are likely to constitute a slightly higher percentage of total capital costs for a low-power transmitter system (such as a small-scale DAB transmitter) than for a large system. While we anticipate few new analogue transmitters coming on-air in the future as broadcasting moves increasingly towards digital transmission, we anticipate that the majority of any new transmitters (for enhancements or extensions to existing Community Radio licensees) will be of fairly modest power and may benefit from us making this change.
- 6.4 If a directional coupler is not fitted to the transmitter, the licensee should be aware that, Ofcom may require the transmitter to be temporarily taken out of service at short notice and without compensation in order for technical compliance measurements to be made.

## Feeder arrangements and performance

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- 6.5 We propose to remove the text relating to antenna return loss for AM (MF – Medium Frequency) transmitters. This proposed change simplifies the Code as it is a parameter that is rarely measured. There are no other changes to the wording of this sub-section.

## Environmental and reliability requirements

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- 6.6 The wording relating to the general requirement for equipment performance to remain stable and compliant with the Code over likely ranges of temperature and other external circumstances remains unchanged.
- 6.7 We propose to remove wording that sets out specific tolerances of power supply voltage that equipment should be able to accommodate, as well as requirements to deal with power spikes, open or short circuits and physical access around equipment. We deem these to be matters for licensees or their transmission contractors to specify and deal with based on prevailing local conditions.

## Electromagnetic fields

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- 6.8 Following a consultation<sup>5</sup> in 2020, Ofcom added a condition to certain spectrum (Wireless Telegraphy Act) licences explicitly requiring holders of those licences to comply with international guidelines on electromagnetic field (EMF) emissions for the protection of the general public. These guidelines have been issued by ICNIRP (the International Commission on Non-Ionizing Radiation Protection).
- 6.9 The new licence condition applies to all radio equipment that is authorised to transmit at powers above 10 watts EIRP, and therefore applies to many licensed analogue broadcast transmitter systems in the UK.
- 6.10 Although this condition applies to each licensee through their individual Wireless Telegraphy Act licences, we propose to add a new paragraph in section 5 of the revised Code to signpost Ofcom’s new requirements on exposure to electromagnetic fields.
- 6.11 This is solely an informative reference to an existing licence condition, so there is no regulatory impact. This addition will also bring the content of the analogue radio technical code in line with that of the digital radio technical code.

### **Consultation question 4:**

Do you have any general comments regarding the proposed amendments to Section 5 dealing with transmitter equipment?

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<sup>5</sup> <https://www.ofcom.org.uk/spectrum/emf/policy>

# A1. Impact assessments

- A1.1 This section outlines the limited impact this work will have on different groups by summarising our impact assessment, equality impact assessment, and Welsh language assessment.

## Impact assessment

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- A1.2 This document, as a whole, comprises an impact assessment as defined in Section 7 of the Communications Act 2003.
- A1.3 We believe that the proposed changes to the technical code pose no adverse effects on current analogue radio transmissions or to other services, nor on broadcasters or listeners.
- A1.4 The implementation of physical changes that are proposed in this consultation such as widening AM channel bandwidth, would only be progressed if we proceed with the proposal, and if our case-by case analysis concludes that this would be achievable without causing interference to either UK and international transmissions.
- A1.5 The impact of the proposed editorial changes is that the code will now be clearer and accessible to a wider range of people.

## Equality impact assessment

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- A1.6 The equality impact assessment refers to the impact of this work on groups or individuals with protected characteristics as outlined under section 149 in the Equality Act 2010, relating to Ofcom's Public Sector Equality Duties<sup>6</sup>.
- A1.7 We have not identified any detrimental impact on any equality groups (i.e. age, disability, sex, gender reassignment, pregnancy and maternity, race, religion or belief and sexual orientation). Nor have we seen the need to carry out a separate equality impact assessment in relation to the additional equality groups in Northern Ireland: political opinion and dependents. This is because we anticipate that the changes proposed in this document will not have a differential impact in Northern Ireland compared to listeners in the rest of the UK.

## Welsh language

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- A1.8 The Welsh language has official status in Wales. As a public body, Ofcom is required to take Welsh language considerations into account when formulating, reviewing, or revising policies which are relevant to Wales (including proposals which are not targeted at Wales specifically but are of interest across the UK).
- A1.9 We do not consider our proposed changes and decisions have any impact on opportunities for persons to use the Welsh language or treat the Welsh language no less favourably than the English language. We also do not believe there are ways in which our decisions and

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<sup>6</sup> <https://www.legislation.gov.uk/ukpga/2010/15/section/149>

proposals could be formulated to have, or increase, a positive impact, or, not have adverse effects or decrease any adverse effects.

# A2. Responding to this consultation

## How to respond

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- A2.1 Ofcom would like to receive views and comments on the issues raised in this document, by 5pm on 22 March 2024.
- A2.2 You can download a response form from <https://www.ofcom.org.uk/consultations-and-statements/category-2/analogue-radio-technical-code>. You can return this by email or post to the address provided in the response form.
- A2.3 If your response is a large file, or has supporting charts, tables or other data, please email it to [broadcast.technical@ofcom.org.uk](mailto:broadcast.technical@ofcom.org.uk), as an attachment in Microsoft Word format, together with the cover sheet. This email address is for this consultation only and will not be valid after March 22<sup>nd</sup>, 2024.
- A2.4 Responses may alternatively be posted to the address below, marked with the title of the consultation:
- Spectrum Broadcasting Team  
Ofcom  
Riverside House  
2A Southwark Bridge Road  
London SE1 9HA
- A2.5 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.
- A2.6 We will publish a transcript of any audio or video responses we receive (unless your response is confidential)
- A2.7 We do not need a paper copy of your response as well as an electronic version. We will acknowledge receipt of a response submitted to us by email.
- A2.8 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.
- A2.9 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 X. 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.
- A2.10 If you want to discuss the issues and questions raised in this consultation, please contact the Spectrum Broadcasting Team by email at [broadcast.technical@ofcom.org.uk](mailto:broadcast.technical@ofcom.org.uk).

## Confidentiality

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- A2.11 Consultations are more effective if we publish the responses before the consultation period closes. 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 responses on the Ofcom website at regular intervals during and after the consultation period.
- A2.12 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.
- A2.13 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.
- A2.14 To fulfil our pre-disclosure duty, we may share a copy of your response with the relevant government department before we publish it on our website.
- A2.15 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

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- A2.16 Following this consultation period, Ofcom plans to publish a statement in XXXX 20xx.
- A2.17 If you wish, you can register to receive mail updates alerting you to new Ofcom publications.

## Ofcom's consultation processes

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- A2.18 Ofcom aims to make responding to a consultation as easy as possible. For more information, please see our consultation principles in Annex x.
- A2.19 If you have any comments or suggestions on how we manage our consultations, please email us at [consult@ofcom.org.uk](mailto: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.
- A2.20 If you would like to discuss these issues, or Ofcom's consultation processes more generally, please contact the corporation secretary:
- A2.21 Corporation Secretary  
Ofcom  
Riverside House  
2a Southwark Bridge Road  
London SE1 9HA  
Email: [corporationsecretary@ofcom.org.uk](mailto:corporationsecretary@ofcom.org.uk)

# A3. Ofcom's consultation principles

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

## Before the consultation

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A3.1 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

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A3.2 We will be clear about whom we are consulting, why, on what questions and for how long.

A3.3 We will make the consultation document as short and simple as possible, with an overview of no more than two pages. We will try to make it as easy as possible for people to give us a written response.

A3.4 We will consult for up to ten weeks, depending on the potential impact of our proposals.

A3.5 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.

A3.6 If we are not able to follow any of these seven principles, we will explain why.

## After the consultation

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A3.7 We think it is important that everyone who is interested in an issue can see other people's views, so we usually publish the responses on our website at regular intervals during and after the consultation period. 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.

# A4. Consultation coversheet

## Basic details

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Consultation title:

To (Ofcom contact):

Name of respondent:

Representing (self or organisation/s):

Address (if not received by email):

## Confidentiality

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Please tick below what part of your response you consider is confidential, giving your reasons why

- Nothing
- Name/contact details/job title
- Whole response
- Organisation
- Part of the response

If you selected 'Part of the response', please specify which parts:

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If you want part of your response, your name or your organisation not to be published, can Ofcom still publish a reference to the contents of your response (including, for any confidential parts, a general summary that does not disclose the specific information or enable you to be identified)?

Yes       No

## Declaration

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I confirm that the correspondence supplied with this cover sheet is a formal consultation response that Ofcom can publish. However, in supplying this response, I understand that Ofcom may need to publish all responses, including those which are marked as confidential, in order to meet legal obligations. If I have sent my response by email, Ofcom can disregard any standard e-mail text about not disclosing email contents and attachments.

Ofcom aims to publish responses at regular intervals during and after the consultation period. If your response is non-confidential (in whole or in part), and you would prefer us to publish your response only once the consultation has ended, please tick here.

Name

Signed (if hard copy)

# A5. Consultation questions

- A5.1 This consultation is seeking views from stakeholders and broadcasters on our proposed changes to the Analogue Radio Technical Code in order to bring it up to date with changes to license conditions and current legislation.

**Question 1:** Do you have any observations or comments regarding the proposed changes to Section 2 of the Code dealing with Scope, Tests and Inspection? In particular do you have any comments on the changes relating to carrying out acceptance testing, and providing information to licensees? Is there anything missing that could make the process smoother?

**Question 2:** Do you have any observations regarding the proposed changes to Section 3 of the Code dealing with FM transmission?

**Question 3:** Do you agree with our proposals for amending the Section 4 dealing with AM transmission?

If you are an existing AM broadcaster that is interested in adopting a wider audio bandwidth, please first discuss feasibility with your transmission service provider. If, following that discussion, you believe making a change is feasible then let us know the following:

- A brief description of what you would like to do regarding audio bandwidth, and what changes would be needed to the Code provisions (permitted audio bandwidth, sideband level etc) to enable the transmitter modification to go ahead. Please also let us know how much it might cost to make the change and what the timescale to implement the change would be.

**Question 4:** Do you have any general comments regarding the proposed amendments to Section 5 dealing with transmitter equipment?