

Updating the amateur radio licensing framework

An approach for today and tomorrow's radio amateurs

Statement

Published 11 December 2023

Contents

Section

1.	Overview	3
2.	Background	9
3.	Overview and assessment of consultation responses	11
4.	Impact of our Decisions	57
5.	Next steps	61
A1.	Legal Framework	64
A2.	Draft licence	67
A3.	Notice of coordination	98
A4.	Special Event Station NoV	101
A5.	Responses	102

1. Overview

- 1.1 This document sets out our decision to update the amateur radio licensing framework to provide greater operating freedom for people using amateur radio, while making the process of getting and using a licence simpler and clearer.
- 1.2 Amateur radio, sometimes known as ham radio, has been an important part of wireless communication technology in the UK for more than a century. It is a hobby that involves the use of radio equipment to communicate with other amateur radio operators around the world. It is a non-commercial service designed for self-training and technical experimentation. In the UK, Ofcom is responsible for managing the radio spectrum and ensuring that it is used in the best interests of everyone in the country, including users of amateur radio. There are more than 100,000 amateur radio licences in the UK currently.

What we have decided - in brief

We have decided to change the amateur radio licensing framework to make the following changes as proposed in the 2023 Consultation document, with some amendments in light of the responses to the consultation. The changes will:

1. Change the licensing framework to:

- Streamline Notices of Variation (NoV) under the three-tier licensing structure;
- Update our mechanisms for revalidation while maintaining lifetime licences;
- Only permit licensees to only hold a single personal licence, requiring the surrender of lower level licences as a licensee progresses; and
- Allow anyone to operate amateur radio under a licensee's supervision.

2. Streamline and modernise call sign assignment to update call sign allocation policy to:

- Introduce a new M8 and M9 Intermediate call sign format;
- Make the use of Regional Secondary Locators (RSL) optional and simplify the process for using a special RSL;
- Introduce the RSL 'E' for optional use by radio amateurs operating in England;
- Simplify the licence terms on the use of call sign suffixes;
- Allow old call signs to be reissued online, and permit licensees to periodically change their call sign;
- Simplify the rules around Special Event Stations; and
- Change the number of call signs that can be held.
- 3. Adjust technical parameters to reflect the evolving needs of the hobby and provide radio amateurs with greater operating freedom by:
- Increasing the maximum transmit power to allow (i) 25 Watts for Foundation and 100
 Watts for Intermediate licensees in most bands; and (ii) 1000 Watts for Full licensees in
 bands where amateur radio has a primary allocation;

- Allowing Foundation and Intermediate licensees to use the internet for remote control operation;
- Permitting the deployment of repeaters, beacons and gateways without requiring an NoV in most cases;
- Allowing Foundation licensees to build their own equipment and access the 2.4 GHz and 5 GHz bands; and
- Enabling low power airborne use in some frequency bands.
- 4. Provide clearer updated rules, with terms and conditions which are easy for everyone to understand by:
- Aligning various terms and conditions with other licences that Ofcom issues;
- Simplifying conditions to remove unnecessary complexity and make them clearer; and
- Removing provisions not necessary for spectrum management purposes.

In response to feedback from stakeholders we have decided to proceed with an amended version of our proposal in some areas. We will:

- Increase the period before a call sign can be reissued or changed to 5 years; instead of the proposed 2 years;
- Increase the permitted transmit power for Foundation licensees to 25 Watts;
- Increase the permitted transmit power for Foundation licensees in the 2.4 GHz and 5 GHz bands to 2 Watts; and
- Allow the use of certain data stations without the need for an NoV.

To implement many of these decisions we need to make changes to all existing amateur radio licences. This means that many of these decisions are subject to the outcome of the statutory processes for varying existing licenses. We have therefore decided to start the statutory process to vary all amateur radio licences by publishing a General Notice which sets out the proposed licence variations. We will publish our final decisions in February 2024 following the conclusion of this process.

Ofcom is updating the amateur radio licence to enable amateur radio to continue to develop as a hobby, within a simplified regulatory framework that supports optimal spectrum use

1.3 Ofcom is responsible for managing spectrum to support a wide range of electronic communications services across the UK and must ensure that its use is optimised¹. In view of this, our policy is to set licence restrictions that are the minimum necessary to provide adequate protection against harmful interference and meet our other wider regulatory duties. We also have a statutory duty to ensure that licence conditions are objectively justified in relation to the networks and services to which they relate, non-discriminatory, proportionate, and transparent in relation to what they are intended to achieve². These

¹ Section 3(2)(a) of the Communications Act 2003.

² Section 8(3)(b) of the Wireless Telegraphy Act 2006.

- obligations are ongoing and must be assessed against market circumstances and the state of technology development at the time.
- 1.4 Our aim with these changes is to ensure that amateur radio can continue to thrive and remain a vibrant and valuable part of the broader communication landscape for years to come. We have focused on ensuring our rules are fit for purpose and have aimed to:
 - modernise our policies and rules to allow radio amateurs greater operating freedoms whilst maintaining appropriate regulatory control over spectrum use;
 and
 - make our rules as clear as possible to improve consistency and responsiveness;
 aligning with other spectrum areas that we authorise where appropriate.
- 1.5 Figure 1 provides a summary of how the changes align with our aims.

Figure 1: Key elements of the amateur radio licensing framework changes

Changes to amateur radio licence	Modernise our policies and rules to allow greater operating freedoms	Clarify and streamline our rules and processes		
Review of licensing framework				
Licensees should only hold a single personal licence		✓		
Allowing greater supervised third party use of radio equipment	√			
Changes to call signs				
Introducing a new M8 and M9 Intermediate call sign format		✓		
Making the use of Regional Secondary Locators (RSL) optional, with simpler rules	√	√		
Permitting the optional use of the RSL 'E' for all licence classes when operating in England	√	√		
Simplifying the process for authorising special RSLs	√	√		
Simplifying licence terms on the use of call sign suffixes and allowing their use on an optional basis	✓	√		
Allowing old call signs to be reissued online	✓	✓		
When our new licensing platform has been implemented, we will allow licensees to change their call sign periodically	✓	√		
Consistent rules on the number of call signs that can be held		✓		
A unified, more flexible Special Event Station NoV	✓	✓		
Technical parameters review				
Increasing the permitted transmit power for all licence levels	✓			
Enabling all licensees to use internet-based technologies for remote control operation	√	√		
Allowing the deployment of most beacons, gateways, data stations and repeaters without the need to apply for an NoV	√	√		
Liberalising the Foundation Licence to allow them to build their own equipment and gain access to the 2.4 GHz and 5 GHz bands	√			

Changes to amateur radio licence	Modernise our policies and rules to allow greater operating freedoms	Clarify and streamline our rules and processes		
Allowing low power airborne use in some bands	√			
Licence terms and conditions review				
Updating the amateur radio licence to have greater alignment with standard Ofcom format and licence conditions		√		
Minor changes to the licence template, simplifying and ensuring consistency with CEPT Recommendation T/R 61-01		√		
Update the licence terms and conditions, removing unnecessary complexity and making them clearer	√	√		

Consultation Overview

- 1.6 We published a <u>consultation in June 2023</u> setting out proposals to make a number of changes to the amateur radio licences and policies to ensure they meet the needs of today and tomorrow's radio amateurs and streamline the licensing process.
- 1.7 We received 1443 responses to our consultation. There was overall support for all our proposed changes, but we did receive some objections and suggestions to improve some of our proposals. We have taken all responses into account and have updated some of the proposals and definitions used based on these. The changes are detailed in Section 3 and the proposed new Licence and Conditions booklet in Annex 2.
- 1.8 This review of the amateur radio licensing framework is part of a broader effort by Ofcom to simplify, standardise, and where possible further automate elements of our licensing work, as referenced in Ofcom's Plan of Work 2023-24³.

Next steps and implementation

- 1.9 None of the changes detailed in this statement will take effect now, but we will look to implement them as quickly as possible. Many of the decisions set out in this document are subject to the outcome of the statutory processes for varying existing licences.
- 1.10 Accordingly, following this statement, we plan to implement the changes in three phases:
 - a) In the first phase we plan to vary the amateur radio licence to incorporate new licence conditions, which would include incorporating some NoVs into the licence and allowing

³ WTA (Wireless Telegraphy Act) licence simplification, p45 and Amateur Radio licences review, p46.

low power airborne use in primary amateur bands. We have today published our proposals to vary all amateur radio licences. Further detail around the variation can be found in the General Notice published on our website⁴. For new applicants, the new licence will be available from when we have made our decision on the licence variation. For existing licensees, our intention is to make the new terms and conditions applicable from when we publish our decision statement on the General Notice as it will take some time to reissue all licence documents. We anticipate that this will be in February 2024.

- b) In the second phase, we will implement the policies that involve straightforward modifications to our existing licensing system or require specific actions from Ofcom that can be delivered within our current systems, such as issuing the new M8 and M9 Intermediate call signs and liberalising the SES NoV. We will strive to implement these changes in 2024.
- c) In the final phase, the policies which require a transition to the new spectrum licensing platform will take effect, such as enabling people to change call signs. This is part of a larger ongoing programme aimed at evolving our current licensing system. We hope to deliver the implementation of these changes later in the 2024/25 financial year.
- 1.11 Further details regarding the timing and substance of each phase are set out in Section 5. These plans may be subject to change; we will provide further updates as needed.

The overview section in this document is a simplified high-level summary only. The decisions we have taken, and our reasoning are set out in the full document.

_

⁴ Representations to this notice can be made until 5:00pm on 22 January 2024.

2. Background

2.1 Amateur radio has long been subject to regulations and licence conditions, designed to ensure the responsible use of the airwaves. Over time, as technology and the hobby have evolved, there has been recognition of the need to periodically review and update the authorisation framework.

Summary of the Consultation

- 2.2 The amateur radio licence had not undergone a comprehensive review for some time, and many of the provisions had been in place since the end of World War 2⁵. In June 2023 we published a consultation <u>Updating the amateur radio licensing framework</u> (the '2023 Consultation'). This set out our view that the provisions and policies developed around amateur radio did not adequately support the needs of today and tomorrow's radio amateurs and therefore, we made proposals for a number of changes to the amateur radio licensing framework.
- 2.3 We sought to greatly simplify the <u>UK amateur radio licence</u> and its <u>Terms and Conditions</u>, associated documentation and processes. We focused on ensuring our rules are fit for purpose, specifically aiming to:
 - a) Modernise our policies and rules to allow radio amateurs greater operating freedom whilst maintaining appropriate regulatory control over spectrum use;
 - b) Make our rules as clear and streamlined as possible, aligning with other spectrum areas that we authorise where appropriate to improve consistency and responsiveness.
- 2.4 Alongside seeking to update our policies and rules considering how radio amateurs operate today and may do in the future, our proposals also looked to remove unnecessary restrictions or administrative requirements that go beyond our duties of ensuring the efficient management of spectrum. Whilst certain restrictions continue to be necessary to prevent interference for neighbouring spectrum users or to comply with international obligations⁶, we did consider whether these could be relaxed. We did not propose any changes to the available frequency bands that amateurs can access.
- 2.5 Our proposals fit into four broad categories:
 - Update the overall licensing framework;
 - Streamline and modernise call sign assignment;
 - Adjust technical parameters to reflect the evolving needs of the hobby and provide radio amateurs with greater operating freedom; and

⁵ The rules placed upon amateur radio are agreed globally at the <u>International Telecommunications Union</u> (ITU) and are published in the <u>Radio Regulations</u>. Regional rules (which apply across Europe and beyond) are agreed at the <u>European Conference of Postal and Telecommunications Administrations (CEPT)</u>. The UK amateur radio licence bears the CEPT logo to signify that it conforms to the applicable regional agreement.

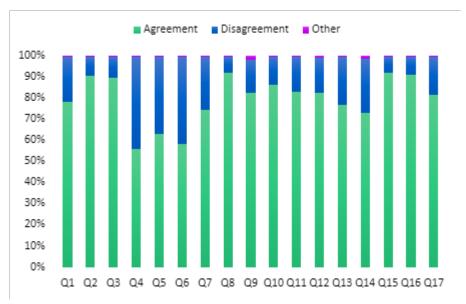
⁶ Article 25.6 of the Radio Regulations.

- Provide clearer updated rules (terms and conditions which are easy for everyone to understand).
- 2.6 We considered that these changes would remove a significant amount of complexity surrounding amateur radio, saving licensees time and effort in understanding the regulatory framework in which they operate and allowing them to feel more confident in understanding and applying the rules.
- 2.7 The consultation opened on 23 June 2023 and closed on 5 September 2023. In the rest of this document, we present our consideration of the responses we received and the decisions which we plan to take forward on the amateur radio licensing framework.
- The 2023 Consultation set out the legal context within which these changes were proposed. This is reproduced in this document in Annex 1. A sample licence and conditions booklet, with the changes we proposed marked up is set out in Annex 2. Annex 3 contains a sample Notice of Coordination document and Annex 4 a copy of the proposed new SES NoV. Annex 5 provides details of where to find the non-confidential responses to the 2023 Consultation.

3. Overview and assessment of consultation responses

- 3.1 We received 1443 submissions in response to our consultation. All non-confidential responses are published on our website.
- 3.2 Overall, we received broad support from the amateur radio community for our proposals, as shown in Figure 2. Many respondents welcomed the proposals and agreed that by providing greater operating freedom and simplifying the licensing process the proposed approach was more suited to the needs of today, and the future of amateur radio.

Figure 2: Overview of general response to each consultation question⁷



Stakeholder comments on our proposals

3.3 In the following section, we have set out the key issues raised in stakeholder responses, together with Ofcom's response and our final decision on each proposal. Owing to the high volume of responses we have identified key issues and themes raised but have not responded to every comment made.

11

⁷ Consultation questions can be found at p.100 of the Consultation document.

Q1. Our proposal that licensees should only hold a single personal licence

3.4 In the 2023 Consultation, we proposed that licensees should only hold a single personal licence. This means that existing licensees with multiple licences would only be able to retain the highest-level licence and would nominate which licence they wish to keep where relevant. We proposed that as licensees progress, their lower-level licence would be revoked, in order to ensure the unique identity of a station is maintained and improve efficiency in the licensing system⁸.

Responses

3.5 While 21.7 percent of respondents raised objections, there was majority approval of this proposal, with 78.1 percent of respondents signalling that they agreed with what we set out. The remaining respondents did not clearly note whether they agreed or disagreed.

Figure 3: Response to Q1 - our proposal that licensees should only hold a single personal licence



3.6 Respondents that agreed with our proposal felt that there was no practical purpose in having more than one licence, and it can lead to confusion over identification. Others said that this proposal would reduce the administrative burden for both Ofcom, and them, by simplifying the licence data.

Issues raised

A radio amateur may use different call signs to signal experimentation

3.7 Several responses highlighted that using different licences and call signs enables separation for experiments and provides others with more knowledge of the conditions the individual is operating under (e.g., a Full Licence holder utilising a Foundation Licence for low power operations). Others suggested they may use different call signs for training themselves or others; and if a mistake were to be made, they would not want their main call sign tarnished.

12

⁸ This approach to licensees holding more than one licence at a given level is consistent with the approach taken by the Radiocommunications Agency ('RA') when it merged the old 'A' and 'B' Full-level licences into a single Full Licence in 2003. Those who held both 'A' and 'B' licences (and call signs) were required to choose one and relinquish the other.

3.8 We understand the importance of experimentation to the hobby. There is no requirement to utilise a lower licence class for experimentation; however, our proposal to allow the use of any suffix offers an alternative means to denote the operating conditions of a station.

A call sign may hold sentimental value

- 3.9 Some of those objecting to the proposal raised the sentimental value attached to holding call signs. The comments highlighted that many users have worked hard and passed exams to gain the licences and would therefore like to keep the call sign attached to the licence. Many of these comments stated that, in their view, radio amateurs have a right to keep all their licences and call signs.
- 3.10 We recognise the sentimental value which some licensees attach to call signs; under our proposal individuals are still able to retain their exam certificates as they progress through the licensing system and will be able to choose which call sign they retain. However, we have considered these points alongside the anticipated benefits of ensuring the unique identity of a station is maintained and improving efficiency in the licensing system.

Concerns that the proposal might lead to overseas licence revocation

- 3.11 Some comments were received over the drafting of condition 1.2(e) relating to the power for Ofcom to revoke a licence if the "licensee holds more than one personal Amateur Radio licence of any class", with a concern expressed that the current wording might be considered to apply to those who also have a licence issued by foreign administrations.
- 3.12 We confirm that our proposals only relate to licences that have been issued by Ofcom.

 Where a licensee holds a licence issued by an administration outside of the UK these will not be subject to this licence provision. Also, the provision will not apply to any Full (Club) licences that a licensee may hold. In light of these concerns, we have made a slight amendment to the condition to confirm that this applies to licences issued by Ofcom.

Some licensees use different call signs for RAYNET functions

- 3.13 RAYNET⁹ volunteers flagged that the group use their Foundation, or Intermediate, licences for emergency calls. Responses stated that this proposal would result in licensees having to use their personal call signs for volunteering purposes making it difficult to distinguish RAYNET accredited users.
- 3.14 RAYNET operate under the same amateur radio licensing conditions as other licensees.

 Accordingly, they can apply for a Full (Club) Licence for their RAYNET group if they do not wish to operate under a personal call sign in the context Emergency Service volunteering.

⁹ RAYNET-UK is the UK's national voluntary communications service provided for the community by licensed radio amateurs.

Decision

We have decided to only permit licensees to hold one personal licence, as proposed, to ensure the unique identity of a station is maintained and avoid the additional costs and administrative burdens which duplication of records in the licensing system places on Ofcom. We plan to make the following changes:

- 1) Existing licensees with multiple personal licences will be able to retain their highest-level licence; in cases where licensees hold multiple Full Licences, they can nominate which licence they wish to keep; and
- 2) When a licensee progresses to the next level of licence, their lower-level licence will be revoked ¹⁰. For example, when progressing from an Intermediate to a Full Licence, the Intermediate Licence will be revoked.

Q2. Our proposal to allow greater supervised third party use of radio equipment

3.15 We proposed to simplify the rules on third party use. For individual licensees, we proposed that anyone should be able to use the radio equipment, providing that this is under the direct supervision of the licensee. Regarding Full (Club) Licences, we proposed allowing greater freedoms so that any Full licensee, with the permission of the club, may supervise others (without licences) to operate the radio equipment. Both measures aimed to remove barriers which could impede the hobby's ability to encourage more individuals, particularly young people, to participate in the hobby.

Responses

3.16 90.6 percent of respondents signalled that they agreed with this proposal, while 8.9 percent raised objections. The remaining respondents did not clearly note a response.

Figure 4: Response to Q2 – our proposal to allow greater third party supervised access to radio equipment



3.17 Those that signalled agreement saw this proposal as a step in the right direction for promoting the hobby to others and encouraging people to join it. Other respondents noted

¹⁰ Revocation of lower-class licences will be achieved through a proposed Revocation provision in the licence terms and conditions. This is set out in Condition 1 of the draft amateur radio licence in Annex 1.

that this would be beneficial for training young people, for instance armed forces cadets and Scouts.

Issues raised

Not all respondents felt changes were needed

- 3.18 Various respondents considered that the current licence clauses on supervised third party use were sufficient, commenting that an unlicensed user is already able to send a greeting message under the supervision of a Full Licence holder. They noted that the current licence also allows Foundation and Intermediate Licence holders to use a club call sign under the supervision of a Full licence holder.
- 3.19 The purpose of our proposal was to both provide greater clarity on guidance that was previously considered complex and unclear and also enable greater freedom. We consider that enabling unlicensed individuals to actively operate the radio equipment under direct supervision would be unlikely to cause interference to others and might also facilitate a wider take up of the hobby.

Concerns were raised that poor teaching might lead to poor operating practices

- 3.20 Many respondents raised concerns around allowing radio amateurs with limited knowledge to supervise individuals with no experience, as it could result in the rise of poor operating practice. However, a range of views was provided on what level of licence an individual should hold before supervising third party access, ranging from Full Licence holders to all licensees. Some felt that allowing Foundation Licence holders to teach unlicensed individuals could leave the hobby open to abuse, and suggested Ofcom impose a lapsed time-period after they gain their licence before they can begin third party supervision.
- 3.21 Under our proposals the supervising licensee would remain ultimately answerable for the operation of the radio equipment; individuals must operate under direct supervision and the licensee must ensure that this is done in compliance with all applicable terms and conditions of the licence. For instance, an unlicensed individual supervised by a Foundation Licence holder can only operate under the terms and conditions of the Foundation Licence. Licensees who do not obey the licence conditions could ultimately have their licence revoked, receive a fine or face criminal prosecution. We consider that these provisions should mitigate potential for abuse or interference from supervised individuals.

Some respondents sought a relaxation on the rules on supervised use in educational environments

- 3.22 We received several requests for us to consider relaxing the rules around how many Full licensees are required to obtain a Full (Club) Licence in educational environments such as schools and universities. The responses suggested that this would further increase visibility of, and accessibility to, the hobby by removing unnecessary barriers.
- 3.23 It is already the case that specific provisions are available for Full (Club) Licence applications for educational establishments such as schools and universities, which do not need to be supported by two other club members and only one Full licensee is required. We will make this clear in the updated Amateur Radio Guidance document.

Decision

We have decided to proceed with the changes as set out in the 2023 consultation, to allow more supervised third party use of amateur radio equipment to enable more people to get involved in the hobby. The changes we plan to make are:

- 1) Any unlicensed individual will be able to use the radio equipment, providing that this is under direct supervision of the licensee. The licensee must ensure that this is done in compliance with all applicable terms and conditions of the licence and at all times remains responsible for the operation of the radio equipment.
- 2) For Full (Club) Licences, where the licensee has agreed, any Full licensee may supervise unlicensed individuals to operate the radio equipment.

Q3. Our proposal for all new Intermediate Licence call signs to start with M8 or M9

3.24 We proposed a new format for Intermediate Licence call signs beginning with 'M8' and 'M9' which would be consistent with Foundation, Full and Full (Club) call sign formats. This would allow us to apply uniform rules on the use of RSLs and lead to a consistent format of call signs for all licence levels over time. We proposed that new Intermediate licensees would be issued a call sign starting 'M8' or 'M9' and existing licensees would be able to change their '2' call sign to the new format if they wished. Existing licensees who wish to continue to use a '2' format call sign can do so but would need to continue to include an RSL in the call sign. We proposed that these changes would take effect as part of phase 2 of our implementation approach.

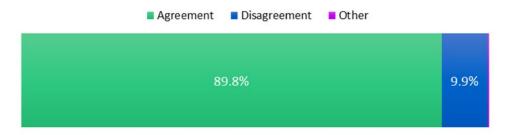
Responses

3.25 We found that most respondents were supportive of our proposal. 89.8 percent flagged support and 9 percent raised an objection. The remaining respondents did not clearly note agreement or disagreement.

16

¹¹ The call signs we assign under the Intermediate Licence are in the format '20ABC' (formerly '21ABC'). If transmitted as assigned, this format would not conform to the requirements of Article 19 of the Radio Regulations. To conform with Article 19, we require licensees to insert a Regional Secondary Locator (RSL) into an Intermediate call sign, to split the digits.

Figure 5: Response to Q3 - our proposal for all new Intermediate Licences to start with M8 or M9



3.26 Those that supported our proposal saw it as a positive step to align Intermediate call signs with the internationally recognisable UK call sign format. It was noted that international radio amateurs can find the current '2' prefix call signs confusing and may not identify these stations as UK based. Others flagged that the current format of Intermediate call signs has held them back from wanting to progress from Foundation to Intermediate and welcomed the change.

Issues raised

Concerns were raised over additional complexity in the call sign system

- 3.27 Those respondents who were opposed to the proposed change argued that it would complicate the call sign system in the UK. Some stated that the current call sign system, whilst complex at times, is well established and the introduction of 'M8' and 'M9' call signs for Intermediate Licence holders would increase complexity and confusion, in particular as Licence holders could continue to hold the former '2' call sign format whilst others would have the new 'M8' or 'M9' format.
- 3.28 Several respondents also argued that our proposal would negatively impact contests. For example, foreign nationals may find it harder to understand call signs if changed. This could negatively impact timed contests.
- 3.29 We recognise that our proposal would create additional call sign formats for Intermediate Licence holders but do not believe that this will have a negative impact on the hobby and note the strong overall support for this proposal. Further, we note that there are already several prefixes available for Full licensees and that the proposals are closer aligned to the other call sign formats Ofcom issues. All call sign blocks are published on the Ofcom website, which should help mitigate any potential confusion, and we note that several responses felt this proposal would have a positive impact on contesting as the new format would be easier to communicate. We would also like to reiterate that, for those who already hold an Intermediate call sign, this change is optional 12. Although we encourage using 'M8' or 'M9' prefixes, Intermediate Licence holders may retain their current '2' format call sign.

Some respondents felt that call sign prefixes should be clearly related to the licence level

3.30 Although agreeing with the need to simplify the call sign system, some individuals argued the prefix should be more clearly tied with the licence level. For instance, Foundation

¹² Where they continue to hold the licence.

- Licence call signs should use an 'F' prefix, Intermediate Licence call signs an 'I' prefix, Full Licence holders an 'FU' or 'M' prefix, and Full (Club) Licence call signs a 'C' prefix. Others however, argued that the class of licence shouldn't be capable of being determined from a call sign.
- 3.31 It is important to note that call sign allocation blocks are assigned to the UK by the International Telecommunications Union (ITU). These call sign blocks are unique to each administration, and therefore, Ofcom cannot authorise call signs which have not been allocated to the UK. Further information on UK call signs can be found in the ITU's Form of call signs assigned by each administration to its amateur an experimental stations document.

Concerns were raised over the availability of Foundation Licence call signs

- A few respondents commented on the fact that there are more Foundation licensees than Intermediate licensees. Consequently, abandoning the '2' call sign block could result in complications should the current Foundation call sign block ('M7') run out. Respondents recommended reserving the 'M8' format for Foundation licensees.
- 3.33 We do not believe that there is any immediate issue regarding the availability of call sign blocks in the UK. In addition, by allowing individuals to hold only a single personal licence, when people progress their lower-level licences will be relinquished. This will mean that, after a cooling off period, the relinquished call signs will be available again. As such we do not anticipate there being any issues regarding availability of call signs.

Decision

We have decided to go ahead with the changes to Intermediate call signs. This as it will lead to a consistent format of call signs and remove some of the current complexity. We will make the following changes:

- 1) We will cease assigning call signs starting with '2' to Intermediate stations, instead issuing call signs starting with 'M8' or 'M9'. We will take this approach in all cases.
- 2) To facilitate existing licensees wishing to move to the new format; where a call sign is on issue in the current format, we will reserve the corresponding call sign in the new format for a period of three years. It is important to note that this is not mandatory and those who wish to continue using their existing '2' call sign can do so, whilst continuing to insert the RSL into their call sign when transmitting.

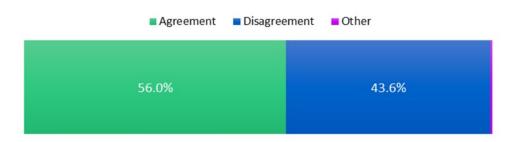
Q4. Our proposal to change our policies on the use of Regional Secondary Locators (RSLs)

3.34 We proposed to remove the mandatory requirement in the licence to use a RSL and instead make their use optional for licensees ¹³. We also proposed to allow licensees in England to use the RSL 'E' if they wished to do so, and to simplify the process for authorising a special RSL. Our aim with the proposals was to simplify our policies in these areas and remove unnecessary obligations placed on licensees that were not required for spectrum management purposes.

Responses

3.35 We received majority support of 56 percent for our proposal outlined in the consultation, whilst 43.6 percent raised concerns. The remaining respondents did not clearly note agreement or disagreement.

Figure 6: Responses to Q4 - making the use of an RSL optional



3.36 Some radio amateurs agreed that, by removing the legal requirement and leaving the matter to personal choice, we would be simplifying the rules and providing greater freedom. Others noted that for those who transmit while mobile, it would reduce the burden on reidentifying the station when crossing borders. A number of respondents agreed with our introduction of the 'E' RSL for those operating in England, noting that it aligns all UK call signs. Some respondents highlighted that removing the need for a Notice of Variation (NoV)¹⁴ for special non-geographic RSLs is beneficial to the hobby and reduces the administrative burden on Ofcom.

Issues raised

For some, RSLs are an important part of an amateur's identity

3.37 The most common challenge to this proposal was related to the fact that many view RSLs as a part of an amateur's identity. Some of these responses highlighted the ties between the use of RSLs and national or cultural identity. For instance, many radio amateurs located in

¹³ With the exception of intermediate licensees who choose to retain a call sign beginning with '2'.

¹⁴ We permit the occasional use of special RSLs to mark special occasions of national significance. Currently, the use such a call sign, a licensee must apply for and download a special Notice of Variation ('NoV') to their licence, which is available in most instances from the RSGB's website and attach it to their licence.

- the nations (Northern Ireland, Scotland, and Wales) raised concerns that removing RSLs would reduce the ability to distinguish between radio amateurs operating in the nations and England.
- 3.38 We recognise that RSLs have strong significance for some radio amateurs and that they can be tied with their sense of national identity. Our consultation proposals took account of this, and the licence will still allow a licensee to use an RSL if they wish to do so. However, on balance we believe that this should be a choice for licensees to make rather than having the requirement imposed on them as a condition of their licence.

Some respondents supported retaining the current provisions for RSLs

- 3.39 A number of respondents objected to the proposals, stating that the current provisions around RSLs are sufficient to regulate the community and it has become convention amongst radio amateurs to use RSLs. Respondents outlined that an RSL can be used to better understand the conditions of others they are interacting with. For example, if an individual was interacting with someone who had a 'W' RSL to reflect their location, it may help explain levels of interference (through better understanding of operating conditions). Others noted that our proposal would allow a single licence holder to switch between call signs, for instance an individual in Scotland, would be able to use both "GM7ABC" and "G7ABC" potentially creating confusion.
- 3.40 It is important to clarify that we are not proposing to prohibit the use of RSLs or remove them completely. This proposal makes the use of RSLs optional, and licensees who wish to continue using an RSL can carry on doing so.
- 3.41 The current amateur radio licence has complex rules which require that an RSL must be used by the licensee when transmitting their call sign in some situations, but not in others. The use of an RSL is not mandated by the Radio Regulations; further we do not believe it is appropriate to continue to include legally enforceable requirements that do not appear to be necessary to fulfil our spectrum management duties or objectives. The proposal to remove the mandatory requirement in the licence is to ensure that radio amateurs aren't breaching licence terms and conditions by not using an RSL.
- 3.42 The core call sign does not include an RSL¹⁵, as this may change depending on where in the UK a radio amateur is transmitting from.

Our call sign proposals might have implications for the use of external databases and licensee contact details

3.43 In response to several of our call sign proposals, many respondents flagged the potential impact on external online databases. Some people noted that their licences and associated call signs are tied to online databases, social media channels and email addresses. They argued that restricting a radio amateur to a single personal licence and call sign would render these services inaccurate, could result in short-term confusion around identification, and would require some radio amateurs to update their personal contact details. Some of these responses noted general agreement with our proposals but flagged that there should

-

¹⁵ Except in the case of '2' format call signs.

- be an implementation period to allow radio amateurs to update their information as necessary.
- 3.44 Others stated opposition to our proposal to make the use of RSLs optional as it could impact awards-based schemes on databases such as QRZ.com and EQSL.com. Awards-based schemes are based on DXCC prefixes (including the RSL) as the 'country multiplier', which respondents noted could be thrown into disarray by removing the mandatory requirement to include an RSL in the call sign.
- 3.45 We consider that our proposed implementation approach under which the changes to our one call sign policy would not be implemented until Phase 2 of the work should provide a sufficient period for radio amateurs to nominate the call sign they wish to keep. We are not requiring people to change any external database logs or personal contact details. Making RSLs optional should have no impact on these sites as they already accommodate UK call signs that don't include an RSL. Radio amateurs are able to continue using an RSL for the purposes of award schemes.

Making RSLs optional might impact DXCC contests

- 3.46 Several respondents referred to potential issues that this change may impose on DXCC contests. For example, some contests may use a format where an individual looks to find as many contacts as possible from a specific country in a certain timeframe and are then issued DXCC awards based on their results. It was stated that our proposals would make this type of contest harder, especially for contests between England and Wales or Scotland.
- 3.47 We recognise that RSLs are important to contests, such as DXCC, and amateur radio users will be able to continue using them on an optional basis. We do not believe that rules for such contests should override our spectrum management duties or require Ofcom to impose mandatory conditions in the licence to support this.

Decision

We have made the decision to go ahead with the proposals to make the use of RSLs optional, as set out in the consultation. We do not believe it is appropriate to continue including legally enforceable requirements that are not necessary to fulfil our spectrum management duties. The changes we plan to make are to:

- 1) Remove the mandatory requirement to use an RSL when operating from the licence, making the use of RSLs optional;
- 2) Introduce optional use of the RSL 'E' for all licence classes when operating in England; and
- 3) Amend the amateur radio licence to allow licensees to use any special RSL as notified by Ofcom to mark special occasions in the UK.

We recognise that RSLs play an important part of the amateur radio operations and confirm that radio amateurs can continue to use them, should they wish to. RSLs

would only remain compulsory in cases where Intermediate licensees continue to use a '2' format call sign¹⁶.

Q5. Our proposal to simplify licence terms on the use of call sign suffixes

3.48 We proposed to remove the licence document references relating to specific suffixes and to amend the licence provisions to make clear that licensees may use any suffix, as long as the station always remains clearly identifiable. The aim of this was to remove unnecessary and confusing rules concerning the use of suffixes from the terms and conditions of the licence and instead provide greater operating freedom to licensees.

Responses

3.49 We received 1,332 comments in response to these proposals. 62.9 percent of respondents supported the proposals, whilst 36.9 percent signalled objection. The remaining respondents did not clearly note agreement or disagreement.

Figure 7: Response to Q5 - making call sign suffixes optional



3.50 Several responses signalled agreement to these proposals, highlighting that these changes provide more flexibility for the hobby. Others noted that this could be beneficial for personal use of beacons, gateways, and repeaters as the use of suffixes allows radio amateurs to demonstrate clearly what activity is being conducted. Many responses caveated their agreement with a recommendation that Ofcom should produce some guidance to address the risk of offensive and inappropriate use of suffixes ¹⁷.

22

¹⁶ To conform with Article 19 of the Radio Regulations. The <u>Radio Regulations</u> are globally agreed rules on the use of radio published by the International Telecommunication Union. Article 19 concerns the identification of stations.

¹⁷ Ofcom has established rules on misuse of Amateur Radio, further information can be found on <u>Ofcom's</u> website.

Issues raised

Some felt that the suffix proposal could lead to abuse and misuse

- 3.51 Respondents raised concerns that this proposal could result in an increase in offensive or abusive suffixes, as in the absence of specific rules some individuals might step outside the boundaries of good operating practice and use these new freedoms to be abusive. Some suggested we should provide guidance on this, and potentially restrict the number of digits a suffix could use to avoid political messaging.
- 3.52 We would like to clarify that suffixes are part of the content of a radio amateurs' transmission and fall under the <u>Wireless Telegraphy</u> (Content of Transmission) Regulations, 1988¹⁸. Any breach of these regulations could be considered a police matter and will be referred to the correct authorities as appropriate¹⁹.

Some respondents thought Ofcom should mandate specific suffix combinations

- 3.53 Some respondents recommended that Ofcom should provide a list or clarify which suffixes are permitted and when they should be used under the new licence. Responses flagged that this would be helpful to better understand which suffixes signify a station's position or operating conditions. For instance, many responses flagged '/A', '/M', '/P'; '/MM'; '/AM' as the only suffixes required, as all denote pertinent information on the operations of a station.
- 3.54 At present, whilst the licence references four suffixes, only the use of '/MM' is mandated in the licence. However, many more suffixes are currently in use including '/QRP', '/YOTA' and '/NHS'. As the suffixes do not form part of the core call sign and are not required for the management of the radio spectrum, we do not believe suffixes should be referenced in the licence. The hobby is best placed to decide when, and what, suffixes are used.

Concerns were raised over the risk of station misidentification

- 3.55 Several respondents flagged that allowing the use of any suffix outside of those internationally defined could result in the misidentification of stations, as stations may be able to fraudulently claim they are operating in another country by adding a suffix to their call sign. Concerns were also raised that this proposal could make call signs too long and complicated. It was argued that any suffix should be clearly defined and directly related to amateur activities to avoid confusion.
- 3.56 One of the reasons for our proposal is that the existing rules can give rise to confusion, for example those around the waterborne use of 'M' ('Mobile) and 'MM' ('Maritime Mobile'). We do not think that the recognition and use of suffixes is a matter for spectrum management; the amateur community is best placed to determine this.

Some respondents thought Ofcom should limit the number of characters

3.57 Several responses, including those in agreement with our proposal, signalled that we should consider limiting the number of characters that an individual is able to use in their suffix. It

¹⁸ The Wireless Telegraphy (Content of Transmission) Regulations 1988 make it an offence to use any station for wireless telegraphy or any wireless telegraphy apparatus to send a message, communication or other matter in whatever form that is grossly offensive or of an indecent, obscene, or menacing character.

¹⁹ Any abuse of this facility would be handled under our established procedures.

- was argued this would help mitigate the risk of suffixes being used for political or offensive messages.
- 3.58 As set out above, we recognise that suffixes remain of great interest to the hobby but do not think there is a role for the spectrum regulator in managing their use beyond the Wireless Telegraphy (Content of Transmission) Regulations. We do not anticipate any substantial negative impact on the hobby from allowing licensees to use whatever suffix they wish, as long as the station remains identifiable.

Decision

We have made the decision to implement the proposals as set out in the 2023 Consultation. We believe the rules regarding when they should be used are not required to support our spectrum management duties and are best left for the hobby to decide. For those reasons we plan to make the following changes:

- 1) We will remove references to specific suffixes in the licence document, and
- 2) We will amend the licence to make it clear that licensees may use any suffix they want, as long as the station remains identifiable.

Q6. Our proposal to amend our call sign assignment policies

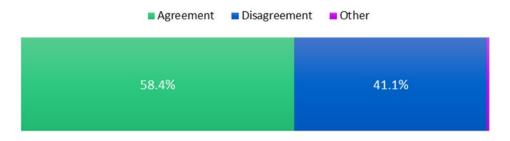
- 3.59 Call signs are an important element of the hobby but do not hold a spectrum management role beyond identifying the licensee when transmitting. We proposed to simplify, standardise, and automate some of our call assignment policies by:
 - a) Making it possible to select from any available call sign, associated with their licence class, when individuals apply online. Old call signs could be reissued after a two-year rest period.
 - b) Allowing licensees to change their call sign periodically when our new licensing platform has been implemented and the proposed new call sign is available²⁰.

Responses

3.60 We received 1,335 comments on this proposal. 58.4 percent agreed with the proposals and 41.1 percent disagreed. The remaining respondents did not clearly note agreement or disagreement.

²⁰ A call sign is available, if it is in the correct format for the class of licence, is not withheld (for example because it is offensive), is not currently assigned to a licensee and has not been in the past two years.

Figure 8: Response to Q6 - our proposal to amend our call sign assignment policies



3.61 Many respondents saw our proposals around call signs as a step in the right direction to increase flexibility and inclusivity in the hobby. They noted that this will allow radio amateurs to choose call signs that are easier to transmit.

Issues raised

Some respondents did not think change was necessary

- 3.62 A number of responses stated that this proposal was unnecessary. Many thought the current system to be acceptable; we do not currently re-issue call signs after the licensee has died or is no longer licensed, and do not allow people to change their call signs unless there are exceptional circumstances. Some recommended that, if we wished to enable the reissue of old call signs, this should be restricted to the relatives of a silent key²¹ only.
- 3.63 The aim of our proposal was to enable a quicker and more flexible approach for radio amateurs. Our current approach does enable some flexibility. For example, applicants are currently allowed to select a desired call sign either from the current series²² online or a call sign with any other permissible prefix via a postal application. Whilst we do not routinely reissue a call sign, our current policies do not prevent this. However, our proposal was to automate this process rather than relying on the current manual process, as it would improve the process for stakeholders and reduce the administrative burden on Ofcom.
- 3.64 One of the aims of the review was to simplify our policies and processes to ensure a more consistent approach to licensing. We considered that the current restrictions around changing call signs were disproportionate. For example, the policy currently requires an individual to provide substantial proof that they have exceptional circumstances which merits a change of their call sign. These are dealt with on a case-by-case basis. We see no spectrum management requirement to maintain these restrictions.

There were requests for Ofcom to make pre-war and short call signs available

3.65 Several responses requested that Ofcom make available pre-World War 2 call signs for long-standing Full licensees or Full (Club) licensees²³. Other respondents asked for shorter format call signs to be made available, with some stating that this should be for Full Licence holders only.

²¹ Amateur radio term for a deceased amateur radio operator.

²² 'M7' for Foundation, '20' for Intermediate and 'M0' for Full.

²³ These begin G2 or a call sign with only two letters in its suffix.

3.66 We acknowledge that some would like to be able to use pre-war call signs, but we currently have no plans to make these widely available. The current policy is that a call sign with only two trailing letters, or which starts with 'G2' is only available if the applicant previously held it. Ofcom does make available some Short Contest Call signs (SCC) available via an NoV, subject to certain criteria being met²⁴.

It was suggested that Ofcom should issue a single call sign for life

- 3.67 A few respondents commented that if we were to issue a single call sign for life, individuals would more easily be able to identify each other, particularly after progressing through the different levels of licenses.
- 3.68 We recognise this approach might bring some benefits but are not considering this option at present given that it would involve a fundamental change to call sign and licensing policy and would be likely to generate significant complexity.

Ofcom was urged to consider a longer cool-off period before reissuing old call signs

- 3.69 The cool-off period refers to the period when a call sign is inactive, before being made available again for reuse by other individuals. In our 2023 Consultation, we proposed that a two-year interval would be sufficient for external databases and the community to be aware of call sign inactivity. However, several responses indicated that a two-year period is not sufficient, particularly in the case of silent keys where sensitivity is required and logbooks that are around for longer than two years. We received several suggestions for intervals such as three, five, seven and ten years respectively.
- 3.70 Having considered the responses, we acknowledge the concerns raised, particularly those around the distress that could be caused to some individuals. Therefore, we have decided to increase the cooling off period to five years to ensure any distress is minimised and provide enough time for databases and logbooks to be updated. During this five-year period the call sign will not be available to be re-issued in any circumstances, including to family members.

It was requested that Ofcom publish a history of call signs, and a list of available call signs

- 3.71 Several respondents asked us to publish the list of available call signs on a routine basis to increase transparency. Other responses noted the need to know the history of a call sign, particularly if it has been held before.
- 3.72 We do not hold a list of available online call signs as these are autogenerated by our licensing system and produced on demand when an applicant applies for a new call sign. Radio amateurs can consent as to whether they wish to have their details published as part of a call book. Historical information on call signs may be available online, or via callbooks.

Some respondents suggested Ofcom should charge a fee to change call signs

3.73 A few respondents suggested that Ofcom charge an administrative fee when changing call signs. It was argued this would mitigate the risk of irresponsible hobbyists abusing the airwaves, by becoming untraceable through a change in call sign.

_

²⁴ Details on applying for a SCC can be found here.

3.74 For now, we have no plans to charge a fee for changing call signs. This is something we may consider in the future once our proposals are implemented.

Decision

Call signs are an important element of the hobby but do not hold a spectrum management role beyond identifying the licensee when transmitting. Considering this, we have decided to proceed with our proposals, with a slight adjustment. The changes are:

- 1) We will allow users to select any available callsign via our online portal; and
- 2) We will enable licensees to periodically change their call sign.

We have decided to increase the 'cooling-off' period to five years, rather than the two years proposed in the 2023 Consultation. During this period, an old call sign will not be available to be re-issued under any circumstances. This interval will also apply to our proposal to allow radio amateurs to periodically change their call signs.

These changes will be implemented when we transition to our new licensing system in 2024/25.

Q7. Implementing consistent rules on the number of call signs that can be held

3.75 We proposed that each individual licensee should only hold one personal call sign at any one time (excluding any temporary special event call signs). In addition, we proposed that Full (Club) Licence holders should be allowed to hold a total of five call signs. These provisions looked to simplify the process and guidance around obtaining a call sign and offer clubs more flexibility to simultaneously operate in different modes, bands, and potentially at different locations.

Responses

3.76 We received 1,346 responses to our proposal. Of these, 74.3 percent responded positively, whilst 25.2 percent raised concerns or issues. The remaining respondents did not clearly note agreement or disagreement.

Figure 9: Response to Q7 - our proposal to implement rules on the number of call signs that can be held



3.77 Many responses saw this as a sensible approach to reduce the administrative burden on both Ofcom and those radio amateurs who currently hold multiple call signs. Some individuals noted that this would increase the number of available call signs and suggested that suffixes could be used to indicate variants in operating conditions. Others agreed that it should be left up to the radio amateur to decide which licence they wish to retain.

Issues raised

Clarification was sought on extra call signs for repeaters, gateways, and contests

- 3.78 Some respondents expressed concern that our proposals might prohibit them from using different call signs when operating repeaters and gateways or during contests.
- 3.79 To clarify, our proposal only related to personal call signs associated with a personal licence. Specific call signs that are assigned to repeaters, beacons, gateways, and contests (currently administered by the RSGB through an Ofcom NoV to the licence) are separate and do not fall within the parameters of this element of our proposals.

A range of views were expressed on whether Full (Club) Licenses require five call signs

- 3.80 Many respondents commented on the number of call signs a club should be allowed. Some argued that five is overly generous whilst others claimed it would be insufficient. Several respondents disagreed with our proposal to limit personal call signs, also stating that a club should only require one call sign.
- 3.81 Most respondents supported our proposals for allowing Clubs to hold five call signs and we believe this is a sufficient number to enable multiple activities, simultaneously.

Some respondents told us they feel a sense of achievement from holding more than one call sign

- 3.82 A number of responses signalled that having to give up call signs which they had previously earned could diminish a sense of recognition. Comments indicated that our proposal would remove a sense of identity related to those call signs, as radio amateurs worked hard to achieve these by sitting the necessary exams.
- 3.83 Some responses signalled that this policy should be limited to new applicants only. This would allow existing licensees to continue to hold multiple call signs that they have held for several years, to which they feel sentimental attachment. Others claimed that it should be judged on a case-by-case basis instead of a catch-all policy.
- 3.84 There are similarities between this proposal and our proposal to only allow licensees to hold a single personal licence, with respondents raising similar objections to both. We discuss our thinking in paragraph 3.10.
- 3.85 Regarding suggestions made to apply this change to new applicants only, to ensure consistency and fairness we plan to only allow one call sign per individual licensee, for all licensees. The single-call sign concept for individual radio amateurs had previously been around for many years until the end of the former BR68 regime in 2009. The ability to hold multiple call signs is not historical.

Some licensees use different call signs for experimentation and different operating conditions

- 3.86 Several respondents flagged that holding multiple call signs can be useful when operating on different frequencies, testing multiple stations or data modes, or demonstrating the conditions under which they are operating (e.g., the use of a Foundation call sign to signal low power operations). Some argued that radio amateurs should be able to continue using more than one call sign should they be able to justify a reason for doing so.
- 3.87 This proposal is linked with our proposal to allow licensees to hold only a single personal licence, and respondents raised similar concerns around experimentation. Please see our response in paragraph 3.8 for our response to the concerns flagged.

Decision

Given that call signs do not have a wider spectrum management role beyond identifying the licensee when transmitting, we are to implement the changes as proposed to simplify and standardise some of our call sign processes. We are therefore going to:

- 1) Limit individuals to one personal call sign at any one time and propose to vary any existing licence which permits more than one specific call sign to reduce the number to one per personal licence²⁵.
- 2) Limit individuals to one personal call sign at any one time and allow Full (Club) licensees to hold a total of five licences/call signs.

Q8. Simplifying special event call signs

3.88 There are currently two types of temporary Special Event Stations NoVs that Ofcom provides: Special Event Stations (SES) and Special Special Event Stations (SSES). We proposed to discard the distinction between SES and SSES and instead permit the use of a more permissive SES NoV, as we saw no spectrum management reason for a distinction between the two. This proposal looked to simplify the processes and rules relating to special event call signs and relieve some of the administrative burden it has previously caused ²⁶.

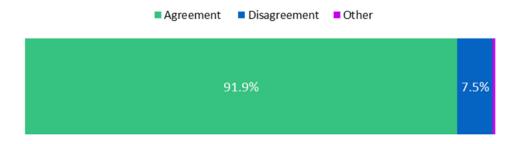
Responses

3.89 We received 1,302 responses in reply to question 8, of which 91.9 percent agreed with our proposal, whist 7.5 percent raised issues or concerns. The remaining respondents did not clearly note agreement or disagreement.

²⁵ Excludes Full (Club) Licence.

²⁶ Policy on temporary call signs and call sign enhancement, Ofcom March 2018, section 4.

Figure 10: Responses to Q8 - our proposal to simplify special event call signs



3.90 There was overwhelming agreement with the proposed changes. Supporters noted that SES are useful to demonstrate and promote the hobby, and simplifying the process offers greater freedom to Clubs. Others agreed that Ofcom's role should be one of spectrum management and licence administration and less about 'applications' of the hobby²⁷.

Issues raised

Some respondents called for more SES call signs

- 3.91 Some respondents said they would like a wider range of SES call signs. For example, some said that that limiting SES to a 'GBx' format would mean that previous call signs such as 'm2000a' would not have been possible. They said they would prefer to see a wider range of call signs available for special events as it would give them a wider range of options to choose from.
- 3.92 Whilst we are not making changes to formats of SES call signs at this time, we may consider allowing different prefix blocks at a later time, or in relation to significant events as has been done in the past. This is providing that they comply with the UK's call sign allocations from the ITU.

Some respondents felt the proposed maximum 11 character call sign length was too long

- 3.93 A small number of respondents considered that 11-character call signs are too long and could potentially hamper reliable identification of a station. Others were concerned that, because of the proposed allowed length, SES call signs could be used as a publicity tool.
- 3.94 The aim of a SES is to showcase the hobby to the general public or promote the event to the amateur radio community. Under our proposals the 11-character limit is the maximum length that would be permitted; applicants would be able to choose shorter call signs if they wish. We would expect licensees to choose appropriate call signs in relation to the event the station is associated with.

More clarity was sought on the proposed duration and cooling-off periods for SES NoVs

3.95 Some respondents raised questions around our proposal to make an NoV valid for one year instead of a maximum of 28 days, specifically whether this meant 28 days within a year, or 28 operational days. The RSGB suggested that an SES call sign should be valid for six months

²⁷ Section 3(2)(a) of the Communications Act 2003.

rather than a year, with a better-defined resting period before a call sign can be applied for by other applicants. Some other respondents recommended that the cooling off period for a SES call sign should be two years.

3.96 For clarification, SES NoVs would be valid for up to one year or the duration of the event, whichever is shorter. We have considered the points made but continue to consider that one year is a sufficient rest period for SES Call signs, due to the temporary nature of the station. We provide an updated SES NoV document in Annex 4.

Decision

Our decision is to withdraw the SSES call sign NoV and introduce a more permissive SES NoV, as there is no spectrum management purpose for a distinctive process between the two. This will include:

- 1) Extending the available call signs to a maximum 11 characters in length, in the format 'GBxccccca'. Licensees will be able to choose any SES call sign, as long as they start 'GBx' and end with a letter.
- 2) Make permanent the decision we took during lockdown to relax a requirement that a SES event must be available to the general public. We believe such a restriction is not required for spectrum management purposes.
- 3) Reduce the resting period for a call sign from two years to one year, in light of the temporary nature of the station. We would however retain the six-month period before an SES when it can be applied for.
- 4) Make the NoV valid for up to one year instead of a maximum of 28 days.
- 5) Permit the dates of operation not to be consecutive, enabling radio amateurs to mark a series of events planned throughout the year.
- 6) Permit mobile or peripatetic operation.

We are not changing the arrangements for Permanent Special Event Stations or Special Contest Call signs.

Q9. Increasing the permitted transmit power for all licence levels

3.97 The class of amateur radio licence determines the maximum permissible power level a licensee is able to use. In light of the objectives of the review, we reconsidered the maximum power that we permit.

3.98 For Foundation and Intermediate Licences, we looked at bands in which we permit the Full Licence to use up to 400 Watts Peak Envelope Power ('PEP')²⁸. Where such a band is

²⁸ Separate provisions apply to some specific bands, as well as proposed authorisations for airborne use. The full detail of proposed power limits is set out in annex A2 in the proposed licence Schedule 1 tables A-C.

available under a Foundation Licence, we proposed an increase in the maximum permissible power to 20 Watts (13 dBW) PEP. Where it is also available under an Intermediate Licence, we proposed to increase the maximum permissible power to 100 Watts (20 dBW) PEP. For Full Licences, where a band is described in the amateur radio licence schedule 1 as being a 'primary' amateur radio band, we proposed to increase the power available to 1000 Watts (30 dBW) PEP.

Responses

3.99 We received 1,357 responses to our proposal, of which 82.4 percent signalled agreement, 16 percent disagreed, and the remaining respondents did not clearly note agreement or disagreement.

Figure 11: Response to Q9 - our proposal to increase the transmit power for all levels



3.100 There was clear support for our proposal to increase maximum power levels. Those that agreed considered that this was long overdue and will bring the UK in line with other countries that already allow increased power levels. Respondents signalled that this could be beneficial to experimentation, portable radios, and transmission in rural areas.

Issues raised

Some respondents considered that current power levels are appropriate

- 3.101 Several people felt that current power levels are appropriate, saying that they are able to 'travel the world with 50 Watts', and the proposed increase is unnecessary. One response stated that whilst there was no objection to raising power levels for lower licence classes (e.g., Foundation and Intermediate), they saw no reason to increase power levels for the Full Licence, particularly in the bands above 70 MHz. Some also felt that there doesn't appear to be a spectrum management need for power increases.
- 3.102 Some respondents argued that current power level limits aren't enforced and are regularly abused; they asked Ofcom to clamp down on individuals who abuse the current maximum permitted power levels.
- 3.103 As advised by a number of respondents, our proposals bring the UK power limits into line with many other countries that permit higher powers. Within these limits radio amateurs can operate at power levels best suited to their needs so long as they remain within the boundaries of what the licence permits. For those who operate outside of the permitted levels, Ofcom retains the right to take enforcement action such as revoking their licence, imposing a fine or pursuing criminal prosecution.

There is limited equipment availability at 20 Watts

- 3.104 We proposed to increase the maximum permissible power for Foundation Licences to 20 Watts PEP. Many responses flagged that nearly all commercially made radios do not have a power step at 20 Watts, and most allow 5 Watts, 25 Watts, or 50 Watts. They stated that, by limiting the maximum permissible power for Foundation licensees to 20 Watts PEP, we would restrict actual usage to 5 Watts PEP.
- 3.105 In response to this feedback, we decided to slightly amend our proposals and increase the maximum permissible power for Foundation Licences to 25 Watts (13.9 dBW) PEP as we do not believe this would increase the likelihood of harmful interference being caused to other users.

Concerns were raised about the potential environmental impact of permitting increased power levels

- 3.106 A number of respondents have suggested that the new proposals make the hobby less environmentally friendly as higher power levels use more energy.
- 3.107 It is important to reiterate that maximum permissible powers are the limits applied in the licence Terms and Conditions, it is not a requirement to transmit at these powers should radio amateurs prefer to use lower powers. While we recognise the increasing importance of climate change and sustainability, we do not currently have any formal duties relating to the environment.

Concerns around different maximum power levels in other countries

- 3.108 Some respondents commented that power limitations for Foundation Licences vary across Europe. Therefore, in their view our proposal would create a greater gap between countries' power limits, resulting in more asymmetries among operating conditions across the world.
- 3.109 It is worth noting that asymmetries already exist globally, as it is the responsibility of national administrations to assign power limits which are not subject to harmonisation. Increasing our power limits aligns our licences more closely with other European countries, such as Italy and France.

Decision

One aim of this review was to grant greater operating freedom for radio amateurs where possible. Considering this, and the majority positive feedback to our proposal, we plan to:

- 1) Increase the maximum permissible power for Intermediate Licence holders to 100 Watts PEP in bands where we currently permit the Full Licence to use up to 400 Watts PEP.
- 2) Increase the maximum permissible power for Full Licence holders to 1000 Watts PEP in 'primary' amateur radio bands, as we do not believe it will risk disruption to other users as similar or higher powers are already in use in neighbouring countries by radio amateurs.
- 3) Continue to use PEP as the primary measure of radio amateur transmit power for most standard operations, with separate requirements for some specific

operations²⁹ and in relation to Electromagnetic Field (EMF) safety requirements.

We also plan to slightly amend the power limits proposed for Foundation Licence holders only. For Foundation licensees, we will propose that the maximum permissible power will be 25 Watts (13.9 dBW) PEP instead of 20 Watts proposed in the 2023 Consultation.

The power increases would apply to 22 Foundation Licence bands (69 percent of all bands), 50 Intermediate Licence bands (93 percent) and 19 Full Licence bands (34 percent). Full details regarding which bands this applies to are set out in Schedule 1 of the draft Amateur Licence Conditions Booklet contained in Annex 2.

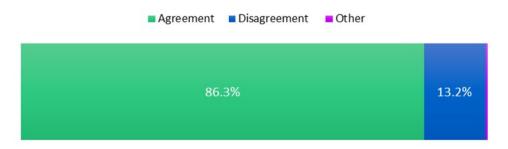
Q10. Enabling all licensees to use internet-based technologies for remote control operation

3.110 We proposed that any amateur radio licensee be permitted to use a non-amateur frequency method of connection such as the internet. Currently this is restricted to holders of a Full Licence.

Responses

3.111 86.3 percent of respondents agreed with our proposals, whilst only 13.2 percent raised a comment of concern and 0.5 percent did not clearly note agreement or disagreement.

Figure 12: Response to Q10 - our proposed changes to remote control operation



3.112 Many respondents considered that this change is long overdue, noting that remote control operation via an internet link is a reliable and straightforward operation. This would make it easier for Foundation and Intermediate licensees to set up links to remotely control their kit, and it is beneficial for the hobby to continue to evolve.

²⁹ For example, proposed power limits relating to airborne use, as well as those relating to the use of repeaters, gateways, and beacons which we have expressed in ERP/EIRP.

Issues raised

Some respondents questioned the need for change

- 3.113 A number of respondents were reluctant for the amateur radio community to use the internet for remote control operations, considering that the current rules were sufficient and true to the essence of the hobby. Others felt that the rules should remain restricted to Full Licence holders only and stated that Intermediate and Foundation licensees would not have the required knowledge to use internet-based technologies for remote control operation.
- 3.114 We have reviewed these comments but consider that enabling the use of the internet for all licensees will support the modernisation of the hobby, provide greater operating freedom, and align the rules with the needs of todays and tomorrow's radio amateurs. It is already the case that Full Licence holders may use the internet. Further, Foundation and Intermediate Licence holders have always been able to do remote control operation via an amateur radio frequency (RF) link; our proposal looks to expand on this by allowing internet-based connections.

Some respondents queried the definition of remote control operation

- 3.115 It was noted that the new definition for remote control operation does not permit the use of the radio equipment by anyone other than the licensee and does not permit general unsupervised use. Some respondents requested clarification on the implications of the new definition for remote control operation. By way of example, one respondent queried whether a group of radio amateurs building a remote station would need to form a Club and, if so, whether they would be able to use their own call sign when operating?
- 3.116 Clause 10(3) of the current Amateur Radio Licence does not permit the use of radio equipment capable of remote-control operation for general unsupervised use by other amateurs and this would continue to be the case. The licence does not prohibit the use of shared equipment but when using it the licensee must be in compliance with the conditions of their licence, such as having their licence information displayed on the radio equipment.

RAYNET members had concerns around the language related to the termination of operations

- 3.117 RAYNET members flagged that the language around operation termination should be amended. Whilst our proposal would update the licence Terms and Conditions to state that "transmissions from the Radio Equipment can be terminated immediately", they advised that it may not always be possible to shut down a remote station immediately.
- 3.118 To take account of the fact that remote control operations cannot always be terminated immediately we propose to amend the text in condition 6.10 of the new Amateur Conditions Booklet to state, "transmissions from the Radio Equipment can be terminated promptly". This should give radio amateurs time to terminate beacon transmissions promptly in all situations without potentially breaching the conditions of the Licence.

Decision

We see no spectrum management reason to prohibit amateur radio use of the communication links such as Wi-Fi or the internet. Taking this into consideration, we plan to:

1) Allow any licensee to use a non-amateur frequency method of connection, such as the internet.

To ensure that radio amateurs have time to terminate transmissions from remotely controlled radio equipment, we propose to amend the text in Condition 6.10 to read "transmissions from the Radio Equipment can be terminated promptly".

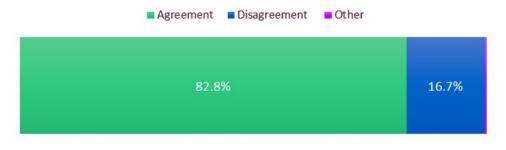
Q11. Allowing the deployment of some beacons without the need to apply for an NoV

- 3.119 In our 2023 Consultation, we proposed that all licensees should be able to deploy beacons providing the radiated power limit does not exceed 5 Watts ERP. In addition, we proposed that Intermediate and Full licensees will be able to use powers up to a limit of 25 Watts ERP subject to the licensee obtaining a necessary call sign from the RSGB or other bodies stipulated by Ofcom³⁰. To deploy a beacon, the licensee must not cause interference to other radio users.
- 3.120 To ensure this, we proposed that the licensee must be able to demonstrate that they have taken steps to minimise the risks of undue interference to other authorised users. We proposed to state in our guidance that one way to demonstrate compliance could be to have the beacons coordinated via the RSGB's Emerging Technology Coordination Committee (ETCC), though this need not be the only method of compliance.

Responses

3.121 82.8 percent of respondents signalled agreement to these proposals. However, 16.7 percent raised concerns, whilst 0.5 percent did not indicate a clear agreement or disagreement in their response.





³⁰ Or any other body that Ofcom may designate in the future as being capable of such allocation.

3.122 Respondents flagged that this proposal would enable better flexibility for radio amateurs, while making the hobby more accessible by enabling Foundation licensees to build upon their learning and improve their knowledge through practical operation. Others stated that this could encourage more technical innovation and research into radio propagation.

Issues raised

Some felt that our proposals could cause further interference

- 3.123 A common objection was that liberalisation of beacons may cause further interference in existing beacon networks. Some respondents recommended that all new applications should be vetted by an NoV to ensure that the RSGB can coordinate the use of beacons, but without a requirement to revalidate annually. Other responses went further, suggesting that coordination around frequency and location should be retained to ensure interference can be mitigated.
- 3.124 Although we appreciate the concerns raised, our proposal included provisions to ensure that licensees must evaluate the risk of interference to other users and be able to provide evidence of this if requested. As explained, one way to demonstrate compliance could be to have the beacons coordinated via the RSGB's ETCC, though this need not be the only method of compliance. If, when asked, a licensee fails to provide adequate evidence to demonstrate their methodology and steps they took to minimise the risk of interference, it would be a breach of the licence and we can require that the beacon to cease operation. Given that all amateur radio licences contain a blanket requirement to not cause interference, we consider that this provides an adequate safeguard to other users.

Use of beacons should be reserved for Full Licence holders

- 3.125 A small number of responses said that the use of beacons should be reserved for Full Licence holders only, owing to the complexities in operating them. These respondents argued that Foundation and Intermediate licensees do not have the adequate technical knowledge to operate them.
- 3.126 Under the current licence, Foundation and Intermediate licensees are already able to deploy beacons. Restrictions were placed on these licence classes for unattended operation only. We do not believe it is necessary to continue imposing these restrictions, so long as the licensee can demonstrate they have taken steps to minimise the risk of undue interference.

Ofcom should reconsider the references to Schedule 2 in the licence

3.127 A number of respondents, particularly the RSGB and RAYNET members, raised concerns over how Schedule 2³¹ was referenced in the licence. They advised that the provision stating that a beacon must "only transmit on the frequency bands and at the locations set out in Schedule 2 of the Licence" was incorrect. Instead, Schedule 2 should only refer to where restrictions are placed on the operation of a beacon in order to protect certain locations.

³¹ Schedule 2 sets out additional restrictions which apply to the unattended operation of beacons.

- 3.128 Several respondents additionally queried why a 5 Watt ERP limit has been imposed on beacon operation, when a 25 Watt ERP limit has been in place for many years and was also included in Schedule 2 of the licence.
- 3.129 We acknowledge the error made in the consultation draft of the licence. After reviewing the beacon provisions again, we have decided to delete Schedule 2 of the licence. Instead, we have included a simplified version of the unattended beacon conditions, based on the RSGB's suggested text, in a new Notice of Coordination document that all licensees must comply with. A copy of this is included in Annex 3 of this document.
- 3.130 We have reinstated the maximum radiated power limit for beacons of 25 Watts ERP for Intermediate and Full licensees. This is subject to licensees obtaining a call sign from the RSGB, or any other body authorised by Ofcom.

Clarification on the process for beacons operating above 25 Watts ERP

- 3.131 Several respondents raised the point that some propagation beacons require greater power than 25 Watts ERP to be useful, and questioned whether these would still be allowed under our new framework, subject to verification of technical parameters.
- 3.132 We would like to clarify that beacons using power above 25 Watts ERP will still be allowed for Full and Intermediate Licence holders if authorised under an NoV. Radio amateurs will have to go through the current process and obtain a special call sign from the RSGB to operate at higher power levels.

Decision

Given the overall support for our proposed changes to beacon operation, we plan to:

- 1) Allow all licensees to deploy beacons providing the power limit does not exceed 5 Watts ERP.
- 2) Permit Intermediate and Full licensees to use powers up to a limit of 25 Watts ERP subject to the licensee obtaining a necessary call sign from the RSGB or other bodies stipulated by Ofcom³².

To ensure that there is no undue interference caused by beacon deployment, we will propose that the licensee must be able to demonstrate that they have taken steps to minimise the risks of interference to other authorised users. We intend to state in our guidance that one way to demonstrate compliance could be to have the beacons coordinated via the RSGB's ETCC, though this need not be the only method of compliance.

If, when asked, a licensee fails to provide adequate evidence to demonstrate the methodology and steps they took to minimise the risk of interference, it may be a breach of the licence and we can require that the beacon to cease operating.

³² Or any other body that Ofcom may designate in the future as being capable of such allocation.

All conditions associated with radio beacon operation are relevant to both attended, and unattended, beacons.

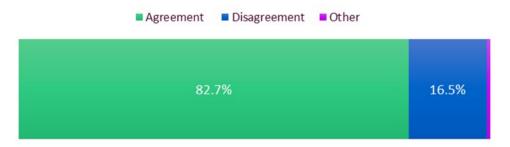
Q12. Enabling all licensees to connect to the internet over gateways³³

3.133 We proposed that all licensees be able to connect the internet via a low power gateway without an NoV. We believe there are benefits in making connection to the internet significantly easier and our proposal laid out our plans discard the need for a gateway NoV for low power amateur radio equipment connection to the internet by authorising this within the licence. We also set out our plans to relax restrictions on unsupervised access.

Responses

3.134 Overall, we received positive feedback to this proposal. 82.7 percent of respondents agreed with our proposals, while only 16.5 percent raised objections. The remaining respondents did not clearly note agreement or disagreement.

Figure 14: Response to Q12 - our proposed changes to gateways



3.135 Many respondents highlighted this as a positive change as it will allow more radio amateurs to experiment with different operating modes, enable greater flexibility, and represent the state of current technology. Others flagged how this could appeal to a wider range of non-radio amateurs, encouraging a greater take up of the hobby.

Issues raised

Some raised concerns that interference could increase by liberalising gateways

3.136 One concern raised by several respondents was the potential for increased interference, as each gateway has a footprint in which no other radio equipment is permitted. Some respondents questioned how this would be coordinated as it could lead to congestion and jamming in some frequency bands. Others questioned whether Ofcom would define a lower power limit which would not require consultation with the RSGB before operating.

³³ "Gateway" means radio equipment that receives on a single frequency for the purpose of connecting to other non-amateur networks.

3.137 As we set out in the 2023 Consultation, low power gateways which operate under 5 Watts ERP, will no longer require a call sign obtained from the RSGB. Radio amateurs with a Full Licence who wish to operate a gateway above 5 Watts would still have to obtain an NoV. Concerning the risk of possible interference, licensees must also evaluate the risk of interference to other users and be able to provide evidence of this if requested. We note that some gateways transmit using very low power³⁴ and are therefore unlikely to cause interference. For higher power devices, as we explained, one way to demonstrate compliance could be to have the gateway coordinated via the RSGB's ETCC, though this need not be the only method of compliance. If, when asked, a licensee fails to provide adequate evidence to demonstrate methodology and steps they took to minimise the risk of interference, it may be a breach of the licence and we can require that the equipment cease operating³⁵. Given that all amateur radio licences apply a blanket requirement to not cause interference, we consider that this provides an adequate safeguard to other users.

Some respondents suggested increased power limits in rural areas

- 3.138 Some respondents advocated for permitting higher power limits for gateways in rural areas, for example suggesting that a maximum permitted power of 10 Watts would enable radio amateurs in rural areas to operate on a par with those who live in urban areas. Others felt that power levels for gateways should match those allowed for repeaters to ensure consistency. A small minority of respondents argued that some radio amateurs would be unlikely to operate within the power constraints Ofcom has set in uncontrolled environments if no was coordination in place.
- 3.139 We consider that the proposed power levels are suitable given that most gateways currently processed by the RSGB operate under 5 Watts ERP. Should the holder of a Full Licence wish to operate a gateway above the power level set out in the licence, it is possible to do so by applying for an NoV to their licence.

Concerns were raised about the lack of coordination of different users

- 3.140 A few issues were raised concerning how the proposal to relax the restrictions and liberalise the use of gateways could result in them being "the only thing operating in a band". Therefore, some respondents felt that all new gateway applications should be vetted through a NoV on a one-time basis. A small number of respondents asked if operation would be allowed in primary bands only; and if we have band plans that clearly state which frequencies can be used for gateways. The RSGB also highlighted that the text in the Conditions booklet needs to clarify that RF network links on repeater inputs require the repeater keeper's permission.
- 3.141 The RSGB, and others, develop band plans which help amateurs avoid clashing modes³⁶. The RSGB have signalled that they are looking at frequency options for low power gateways.

 Additionally, as suggested by the RSGB, we plan to include a new provision in the licence

³⁴ Below 100 mW.

³⁵ More information around reporting interference can be found on the Ofcom website.

³⁶ For example, <u>RSGB 432MHz Band Licence Conditions</u>.

that requires that before a third-party RF network link can connect to a repeater, they must have the repeater keeper's permission to do so.

Further clarification was sought on the definition and operating requirements of gateways

- 3.142 Some concerns were flagged around the lack of clarity regarding the relationship between gateways, repeaters, and data. Some respondents felt that the removal of wording that specifically referenced the sending of data packets in the new definition would result in confusion. It was suggested that characteristics of a gateway need to be clarified to ensure all current modes of operation remain in scope.
- 3.143 We received a handful of responses asking for further clarity on the operating requirements of gateways. For example, some mentioned that it needs to be clearer on whether gateways need to be operated from main station address or not. Others asked for clarity on what categories apply to packet and other data-based stations, or questioned what types of gateways are permitted, such as analogue or duplex hotspots.
- 3.144 Having considered these responses, we have proposed to amend the definition to: "Gateway" means radio equipment that transmits and receives on a single frequency for the purpose of connecting to other non-amateur networks. This amendment removes reference to the internet, leaving scope for other mediums of connectivity as well as a range of different data modes. Gateways can be operated at any location but if the gateway is unattended, then the licensee must adhere to the provisions relating to this type of use in their licence. We believe the decisions on the types of Gateway operation that licensees use should be for the amateur community and not Ofcom to decide.

Decision

One of our overarching aims was to provide greater operating freedom for radio amateurs where we do not think this would lead to increased interference risks. Given the feedback from respondents on our proposals we plan to:

- 1) Discard the need for a gateway NoV when operating below 5 Watts ERP.
- 2) Relax the restrictions around unsupervised use of the equipment by other radio amateurs, making it easier for individuals to gain access to the internet via a gateway.

We will propose a slightly adjusted definition of a gateway upon feedback from the RSGB and others; the proposed definition now reads: "Gateway" means radio equipment that transmits and receives on a single frequency for the purpose of connecting to other non-amateur networks.

Where a gateway operates in a dog-leg (via a repeater), the general rules for the use of a repeater will continue to apply.

Where a gateway operates above 5 Watts, a NoV is still required.

Q13. Deployment of repeaters without the requirement for an NoV for Intermediate and Full licence holders

- 3.145 We looked to relax some of the conditions in the licence to allow Intermediate and Full licensees to deploy a repeater without the need for an NoV, subject to certain conditions being met. We proposed to allow Intermediate and Full, Full (Club) or Full (Temporary Reciprocal) Licence holders to deploy low power repeaters (under 5 Watts ERP) without the need for an NoV, and allow holders of a Full, Full (Club) or Full (Temporary Reciprocal) Licence to deploy repeaters at powers above 5 Watts ERP once a specific call sign has been obtained from the RSGB, or other body stipulated by Ofcom.
- 3.146 Similar to our proposals for beacons, the licensee would need to demonstrate how they have addressed the risk of interference to other radio users. We said that we would not stipulate how this must be done, but coordination via the ETCC process would be one way of achieving this.

Responses

3.147 We received 1,260 responses to this proposal. 77.1 percent of respondents agreed with our proposed changes, 22.5 percent responded 'no', flagging concerns. The remaining respondents did not clearly note agreement or disagreement.

Figure 15: Response to Q13 - our proposed changes to repeaters



3.148 Most respondents agreed with our proposed changes to repeaters, noting this will be beneficial to radio amateurs in rural areas and could increase the number of experiments. Others noted that Intermediate licensees are well qualified and enabling them to operate repeaters would not force them to progress to the Full Licence. RAYNET members highlighted that this would have a positive impact on their activities, particularly in circumstances where they may need a temporary repeater on air.

Issues raised

Some respondents felt that higher power levels were required for repeaters

3.149 One of the most common responses to our proposed changes was around the need for greater power for repeaters, specifically for primary bands. Some respondents suggested that we could regulate an upper power limit, and that maximum permitted power should be specific to each band. The RSGB flagged that there should be an explicit limit of 25 Watts ERP. 3.150 We acknowledge the comments raised and plan to include an upper power limit of 25 Watts ERP in the licence. We note that the vast majority of repeaters today operate within the conditions set out in the licence. In certain special cases a repeater may be needed with power levels exceeding this limit, this would require a NoV to a Full Licence, and we would consider any application for these on a case by case basis.

We were requested to expand the scope of the new repeater definition

- 3.151 Several respondents, alongside the RSGB, flagged some concerns with the proposed repeater definition. It was highlighted that, although the definition consulted on does cover the majority of NoVs in scope, it would leave a number out of scope. The RSGB recommended that we modify the definition to clearly incorporate non-simultaneous store and forward messaging and single-frequency time-division duplexing (TDD) systems.
- 3.152 We have considered the overall feedback and have amended the definition, taking suggestions from the RSGB into consideration. The repeater definition now reads: "Repeater means radio equipment that is capable of reception and retransmission".

Some respondents raised concerns around interference and coordination

- 3.153 We received various comments related to coordination of repeater use and interference. Several radio amateurs suggested vetting new applications, while removing the requirement of annual renewal. Some suggested that coordination should remain mandatory, and that clearance should be required from the ETCC, as it could help ensure that private repeaters do not congest bands in specific areas. Others recommended that location of repeaters should be recorded to reduce the risk of interference, and more clarification around how allowed frequencies will be identified and managed.
- 3.154 There remains an obligation on licensees to demonstrate how they have addressed the risk of interference to other radio users, and the RSGB do develop band plans which may support coordination. We also note that the overall response from radio amateurs signalled strong support for the proposals as set out in the consultation.
- 3.155 In addition to these general provisions regarding assessing interference, in some bands (430 440 MHz and 1240 1325 MHz) there will continue to be a requirement for any repeater to be coordinated with the Civil Aviation Authority (CAA) and Ministry of Defence (MoD) before any transmissions may begin. Under the new process, clearance requests for the deployment of a repeater in these bands must still be sent to Ofcom. Clearance requests should only be sent once a provisional call sign has been obtained from the RSGB and the applicant has conducted the necessary interference assessment and has provided evidence of this as part of the clearance request. If the clearance application is successful Ofcom will provide the necessary clearance authorisation, where coordination is possible. We will continue to work with the CAA and MoD about these arrangements.

Concerns from RAYNET members

3.156 Various members from RAYNET signalled that they thought that all unattended repeaters should still require a specific call sign. However, they also stated that applying for and using individual special call signs for the operation of every one of their temporary repeaters would be impractical. They flagged that RAYNET often operate repeaters above 5 Watts and proposed a special permit set for such operations, with predefined call signs. Some RAYNET members requested to be a notified body for issuing repeater call signs.

3.157 Under our proposals repeaters with a power limit above 5 Watts would continue to require the licensee to obtain a call sign and NoV. We do not believe it is necessary to require all low power repeaters to have a call sign as the risks of any interference are low. We will further engage with both the RSGB and RAYNET on the use of temporary repeaters to discuss the call sign and clearance process, including the possibility of RAYNET becoming a designated body for repeater call signs.

Repeaters should only operate on frequencies above 28 MHz

- 3.158 The RSGB, in their response, flagged that the current repeater NoV only allows operation of repeaters on frequencies above 28 MHz for reasons of spectrum efficiency, international high frequency protection and coordination. They recommended that this be included in the licence terms and conditions given the proposed removal of the NoV requirement.
- 3.159 We agree with the RSGB's suggestion and we propose to introduce a provision to the licence noting that repeaters must operate on frequencies above 28 MHz, under condition 6(14).

Decision

Given the feedback from respondents, we plan to proceed with the repeater proposals as set out in the 2023 Consultation. By embedding many of the current NoVs into the standard licence conditions this will provide greater operating freedom for radio amateurs. The changes we plan to make are to:

- 1) Allow Intermediate and Full, Full (Club) or Full (Temporary Reciprocal) Licence holders to deploy low power repeaters (under 5 Watts ERP) without the need for an NoV; and
- 2) Allow holders of a Full, Full (Club) or Full (Temporary Reciprocal) Licence to deploy repeaters at powers above 5 Watts ERP. For these higher power repeaters, licensees will also need to obtain a specific call sign from the RSGB, or other body stipulated by Ofcom.

However, we plan to change some aspects of the proposal slightly:

- 1) The licence provision will include a 25 Watts ERP upper power limit;
- 2) We have amended the definition to ensure that everything currently permitted under the NoV remains in scope;
- 3) We have included a provision that states that repeaters can only operate on frequencies above 28 MHz; and
- 4) We have included a provision stating that repeaters must transmit in accordance with any restrictions as notified by Ofcom.

Licensees will need to demonstrate how they have addressed the risk of interference to other radio users. Licensees always remain responsible for the operation and compliance of the repeater. They must ensure that the repeater can be shut down within two hours of Ofcom requiring the repeater to cease operation. Failure to provide such a mechanism will be a breach of the licence.

Q14. Liberalisation of Foundation Licences to allow licensees to build their own equipment and access the 2.4 GHz and 5 GHz bands

3.160 To support experimentation, we proposed to allow Foundation Licence holders to build their own equipment, removing the restriction in the Foundation Licence that only authorises them to use commercial equipment. Given the ability of Intermediate and Full licensees to use the 2.4 GHz and 5 GHz bands, we also proposed to allow Foundation licensees use of these bands, subject to a maximum 1 Watt (0 dBw) PEP power restriction.

Responses

3.161 Overall, we received a positive response to this proposal. 73 percent of respondents signalled agreement, while 25.6 percent opposed. The remaining respondents did not clearly note agreement or disagreement.

Figure 16: Response to Q14 - our proposal for Foundation Licence holders to build their own equipment



3.162 Most respondents saw this change as positive for the hobby. They highlighted that building equipment is beneficial for Foundation licensees, as it can encourage band occupancy and activity. It would also encourage Foundation Licence holders to experiment. Others noted that it could increase the appeal of the hobby to non-radio amateurs.

Issues raised

Some respondents considered that Foundation Licence holders should not be granted permission to build their own equipment

- 3.163 Several respondents questioned whether it is appropriate to allow Foundation Licence holders to build their own equipment, stating that Foundation Licensees may not have the necessary qualifications or experience to do this, which could result in increased interference.
- 3.164 At the same time, this measure will help support experimentation and this proposal was supported by 73 percent of respondents. Given that all amateur radio licences apply a blanket requirement to not cause interference, we consider that this provides an adequate safeguard to other users.

A concern was raised around the potential for increased interference in the 2.4 GHz and 5 GHz bands

- 3.165 A couple of responses expressed concern that our proposal to allow Foundation Licence holders access to the 2.4 GHz and 5 GHz band would, in their view, be likely to cause interference, specifically to aircraft.
- 3.166 Notwithstanding this concern, we think it is unlikely that enabling access to these bands for Foundation licensees at lower power levels would cause interference to aircraft, noting that Intermediate and Full Licence holders have been able to access these bands for some time with significantly higher power than what was proposed for Foundation licensees.
- 3.167 Some respondents called for increased maximum permitted power for Foundation licensees in the 2.4 GHz and 5 GHz bands. Several respondents, including the RSGB and RAYNET, commented that whilst 1 Watt PEP is suitable for terrestrial use, it would be insufficient for uplink to the QO-100 Geostationary satellite transponder. They stated that a power limit of between 2 to 5 Watts PEP should be sufficient to facilitate this operation.
- 3.168 Considering feedback from respondents, we propose to amend the maximum permitted power to allow users to transmit at 2 Watts PEP. We do not believe there would be a negative impact on other users, or increase in interference from doing so.

Decision

Given the majority support for these proposals, we plan to proceed largely as set out in the consultation. We plan to:

- 1) Allow Foundation licensees to build their own equipment as we believe it is beneficial to the hobby and will encourage experimentation.
- 2) Allow Foundation licensees to access the 2.4 GHz and 5 GHz bands.

We also propose to slightly increase the maximum permitted power level for Foundation licensees in the 2.4 GHz and 5 GHz bands to enable 2 Watts PEP.

Q15. Allowing low power airborne use in some bands

3.169 We have received requests to permit amateur radio equipment to be used airborne and we therefore reviewed the restrictions on this. We proposed that, where a frequency band is defined as a 'Primary' amateur band³⁷, we could allow low power airborne use by amateur radio³⁸. We proposed a power limit of 500mW EIRP.

³⁷ See list of amateur bands in Schedule 1 of the Amateur Radio Licence in Annex 2.

³⁸ We have published information about the licence-exempt use of radio equipment on our website.

Responses

3.170 92 percent of respondents stated that they agreed with our proposals around airborne use, whilst only 7.6 percent signalled opposition. The remaining respondents did not clearly note agreement or disagreement.

Figure 17: Response to Q15 - our proposal to allow low power airborne use in some bands



3.171 Respondents noted that low power airborne use is already successful in some other European countries, and our proposal would align with this³⁹. Experimentation could benefit from greater freedom in this area, for example, by allowing Automatic Packet Reporting System (APRS) tracking from balloons over the UK.

Issues raised

Some respondents felt that the proposed power levels were too low

- 3.172 Whilst 500mW may be appropriate for unmanned aircraft, to limit interference, some respondents said higher power would be needed when a radio amateur is operating in a pilot-controlled aircraft. Some suggested a higher power level, of 5 Watts EIRP, would be more suitable.
- 3.173 At this time, we believe 500mW EIRP is a suitable power level for this operation, aligned with power limits for other Short Range Device communications. We have noted the feedback from some responses and may revisit these power levels at a future date.

There were concerns around the potential for interference to aeronautical radio equipment

- 3.174 A few responses noted that low power airborne use could result in some interference to aeronautical radio equipment. For this risk to be reduced, some recommended that only Intermediate and Full Licence holders should be allowed to operate in these conditions.
- 3.175 Any amateur radio deployment on an aircraft is only permitted in the licence subject to the agreement of the pilot, or the person in chair of the aircraft, as set out in the licence. Operation in an aircraft needs to take into account the <u>Civil Aviation Authority's (CAA) air safety rules</u>. Taking account of the proposed requirements in our licence, and the CAA rules, we believe these are an adequate safeguard against any such interference risks to aircraft.

_

³⁹ Austria, Bulgaria, Czech Republic, Germany, Greece, Switzerland, and Ukraine.

- 3.176 Concerns were raised around the potential for radio amateurs to undertake unauthorised airborne activity. A minority of respondents flagged that introducing permitted airborne use, albeit with specific band and power restrictions, could result in some radio amateurs utilising secondary allocations for this type of operation, despite this not being authorised. The 2m (144 148 MHz) and 70cm (440 MHz) bands were specifically highlighted in relation to this concern.
- 3.177 Our proposal clearly states that low power airborne use by amateur radio will only be available for Primary allocations. Should radio amateurs use Secondary allocation bands for this service, they would be in breach of their licence, which could result in the revocation of their licence, a fine, or imprisonment⁴⁰.

Decision

Given the overwhelming support for this proposal, we have decided to proceed with the changes as proposed. We plan to allow low power airborne use at a power limit of 500mW EIRP⁴¹ in Primary amateur radio bands.

Licence format, Terms and Conditions (Q16 & 17)

- 3.178 We undertook a fundamental review of all the terms and conditions in the existing Amateur Radio Licence. We concluded that the terms and conditions could be simplified and contained some unnecessary provisions, supplementary notes, and definitions. We therefore proposed several changes to the licence to allow radio amateurs greater operating freedoms, whilst maintaining appropriate regulatory control over the use of the spectrum. At the same time, we wanted to make our rules as clear and streamlined as possible, aligning with other spectrum areas that we authorise, where appropriate, to improve consistency and responsiveness.
- 3.179 In the 2023 Consultation we outlined the following proposals:
 - Align the format and conditions of the licence with other spectrum licences that Ofcom issues;
 - Update the licence template to simplify and ensure consistency with CEPT Recommendation T/R 61-01⁴²;

⁴⁰Licensing Policy Manual, Section 11.

⁴¹ We note that in the case of airborne uses, the power limit is expressed as EIRP, rather than ERP as used in other limits.

⁴² As a signatory to <u>CEPT Recommendation T/R 61-01</u>, our Amateur Radio licence document must contain certain provisions. This makes it possible for radio amateurs from countries who have signed up to it to operate during short visits to other signature countries without needing to obtain an individual temporary licence from the visited country. For the UK, this applies to the holders of a Full Licence. For the purposes of this consultation, we have only included a version of the Proposed Amateur Radio Licence in English.

- Create a new Amateur Conditions Booklet, that also provided information on how the proposals set out in the 2023 Consultation could be implemented into the licence⁴³; and
- Make some other changes that would simplify or clarify the existing licence terms and conditions.
- 3.180 We provided a copy of the proposed Amateur Radio Licence in Annex 2 of the 2023 Consultation.

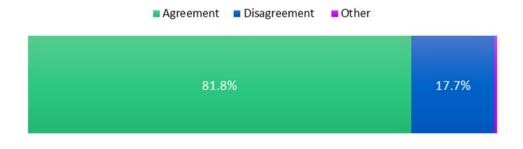
Responses

- 3.181 For question 16 on proposed changes in licence format and the alignment of standard terms and conditions, 90.9 percent of the 1,276 responses supported our proposals to update the format of the licence and the licence conditions and 8.6 percent disagreed. The remaining respondents did not clearly note agreement or disagreement.
- 3.182 81.8 percent of the 1,269 respondents agreed with our proposals outlined in question 17 regarding proposed changes to the licence terms and conditions, while 17.7 percent raised concerns and 0.5 percent did not clearly note agreement or disagreement.

Figure 18: Responses to Q16 - our proposed changes in licence format and alignment of standard terms and conditions



Figure 19: Responses to Q17 - our proposed changes to licence terms and conditions



49

⁴³ This means that the Amateur Conditions Booklet would be set out as follows: Condition 1: Licence Term, Variation and Revocation; Condition 2: Changes; Condition 3: Licence Fee; Condition 4: Geographical Boundaries; Condition 5: Coordination (new); Condition 6: Radio Equipment Use; Condition 7: Access and Inspection; Condition 8: Modification, Restriction and Closedown; Condition 9: Electromagnetic Fields (EMF) Compliance; and Condition 10: Interpretation

Issues raised

General comments

- 3.183 There was overall support for the proposed updates to the terms and conditions of the licence. A number of respondents agreed that an update was necessary and that the proposed Amateur Radio Licence was clearer and simpler to understand.
- 3.184 Some respondents commented that a blanket yes or no response to this question was difficult, and others used these two questions to reaffirm comments they had made in previous questions. Several respondents stated that due to their responses on earlier proposals they could not agree with the proposed format of the licence or the draft terms and conditions, for example the proposals regarding changes to RSLs and repeaters. In many cases, they advised that if their concerns were addressed, they could support the proposals.
- 3.185 We note and welcome the overall support for the proposed changes. Where comments were raised relating to other questions in the 2023 Consultation, we have addressed these in the paragraphs above, under the specific question they related to. In addition to the changes noted below, we have also reviewed the text in the licence to correct any errors and made some minor administrative amendments to make the text clearer. All of these have been marked up in the copy of the draft Amateur Radio Licence set out in Annex 2 of this document.

Introduction of a new data station mode of operation

- 3.186 In their response the RSGB proposed a new licence condition to allow the authorisation of a wide variety of other data systems, mainly machine-to-machine operations, currently authorised via an NoV to the licence. They requested that a new category of operation be added to the licence to cover data stations that can be used by other radio amateurs without supervision. The ETCC currently coordinates a range of these uses. They explained that the proposed data station provision would permit the following types of operation under the licence; APRS, UIView/Packet, data/trunk links, RF mesh networks. The RSGB proposed some text for the licence based on the proposals for other forms of operation we set out in the licence.
- 3.187 Having reviewed the request by the RSGB we believe that there is merit in including these other forms of operation under the licence. The proposed provisions further liberalise the licence and remove the need for additional NoVs. As stated by respondents, there is increasing interest in these areas of operation and greater use of machine-to-machine communications, and we wish to ensure that the licence not only meets the needs of current radio amateurs but for the future. This proposal is in line with the aims of this review and therefore, we plan to include a new data station operation condition in the licence.

Licence main page

- 3.188 A number of amateurs requested that Ofcom keep the 'first issued' field in the licence. They argued that this provides important historical information, and many licensees are proud of their time in the hobby and how experienced they are. Some respondents commented that the removal of the mailing address from the cover of the licence poses a risk that the address is not correctly recorded in Ofcom's database.
- 3.189 Based on the responses we have received we acknowledge that the first issue date of the licence is something that licensees wish to retain. We have considered this in line with the

other licences that Ofcom issues and will retain this field in the licence template. Concerning the mailing address, this will be used by Ofcom to send correspondence to and will continue to be stored in the spectrum licensing database. Our proposal was only to remove this from the cover of the licence.

Licence term and variation

- 3.190 A small number of responses raised concerns over Ofcom's use of notices published on its website for proposed licence variations. They advised that this risks individuals not being made aware that a variation would be taking place.
- 3.191 Regarding the use of notices on Ofcom's website to propose to vary a licence, this provision was already contained in section 2 clause 4(3) of the existing Amateur Radio Licence. As explained in paragraph 7.22 of the 2023 Consultation, in 2021 when we last varied licences to include the EMF clause, we notified everyone individually but advised that going forward we would be making greater use of web notices. We would encourage all licensees to subscribe to email spectrum updates to stay up to date with our proposals, decisions, and any future changes.

Geographical boundaries

- 3.192 A number of respondents commented on the proposals to redefine how the geographical boundaries of the licence are expressed. Some welcomed the clarity concerning whether the licence permitted the use of their radio equipment offshore. Other respondents stated that the references to Maritime Mobile ('/MM') should be retained and mandated where a station is being operated from a vessel in international waters as this is important to note operating conditions.
- 3.193 Some respondents stated Ofcom should use the international waters definition instead of high seas. However, other responses advised that the condition which referenced use in "high seas" may be inappropriate as Ofcom are not the regulatory body for those areas outside UK territorial waters.
- 3.194 One respondent questioned whether the definition would need to include the airspace above the UK if airborne use were permitted.
- 3.195 As we set out in paragraph 4.32 of the 2023 Consultation, we do not believe there is a role for the spectrum regulator in managing the use of suffixes. Therefore, we do not agree with the continued inclusion of a reference to '/MM' and the rules associated with using it within the licence, though radio amateurs can continue to use this suffix should they wish to do so.
- 3.196 We have removed from the draft licence text relating to Full licensees being able to operate on the High Seas. We have done so as Ofcom's jurisdiction does not extend to these areas and therefore, we cannot enforce licence terms and conditions. However, we do acknowledge that under international rules Full licensees may continue to operate on the high seas.
- 3.197 We have further amended the proposed text relating to the geographical extent of the licence to also cover airborne use. The proposed new text will cover the use of radio equipment in and over the UK, Crown Dependencies and associated territorial waters.

Coordination

- 3.198 The RSGB were content with the introduction of a new provision that enabled Ofcom to issue licensees with a notice of coordination, but they stated it required guidance. They noted that the example of the Ofcom document "Frequency sharing arrangements between civil and military services" contains some of the coordination requirements amateurs must operate under but there are more. Others objected to only being "notified" about coordination requirements as this suggests no consultation would take place prior to any changes being implemented.
- 3.199 We note the comments from the RSGB and as we set out in paragraph 3.155, we intend to use this new provision to notify users of the coordination requirements for unattended beacons and repeaters. We believe it would be beneficial to licensees to make all this information easier to access in a single place. This change also makes implementing any future changes, following consultation where appropriate, more efficient as we would not have to vary the terms of all 100,000 licences. Annex 3 contains a copy of the Amateur Radio Coordination Notice that we will publish alongside the licence terms and conditions. We will also consider further whether there are elements set out in the Annexes of Public Sector Spectrum Release: Amateur use of 2310 to 2450 and 3400 to 3475 MHz, published in 2014, that could be helpful to incorporate into, or provide supplementary guidance to, the Coordination Notice.

Who may operate the radio - responders

- 3.200 We received a number of responses concerning the drafting of the proposed condition 6.4(k), relating to the use of the radio equipment to assist with communications in times of disaster or national or international emergency. This issue was raised by the RSGB, RAYNET, and those involved in RAYNET activities.
- 3.201 The responses stated that the new definition of 'responder' excluded voluntary organisations such as St. John's Ambulance and Local Councils that previously were included under the previous definition of 'user service'. The proposed definition of 'responder' only applied to a category 1 or 2 responder as listed in schedule 1 of the Civil Contingencies Act 2004. RAYNET and other regional RAYNET groups advised that the change in definition would adversely affect the way amateur radio emergency communications is currently delivered. They stated that the proposed provision 6(7) should be replaced with the current clause 1(2) wording.
- 3.202 RAYNET in their response advised that out of 628 event reports from RAYNET groups for the period between 1st August 2022 to 31st July 2023, 78 percent of these events related to voluntary agencies and 22 percent for category 1 or 2 responders. They also went on to advise that there is no reference to supporting the responders, either operationally or during a training exercise, in such emergencies as is currently referred in clauses 1(2) and 1(3) of the current licence conditions. They stated that the current clause 1(2) in the licence allows operations in local emergencies or for exercising to prepare for such emergencies and said that cooperative training exercises need to be permitted, using the protocols developed for emergency communication, involving non-amateurs. This helps maintain their skills for this type of operation.

- 3.203 We acknowledge the error made regarding the definition of 'responder', and we will revert to the current 'user service' definition, as set out under clause 17(1)(q) of the existing Amateur Radio Licence.
- 3.204 Regarding the ability to support local emergencies, or training for them, we acknowledge the comments received. We will ensure that local emergencies and training operations, to support emergencies, continue to be covered under a new amended condition 6.5.

Making transmissions – encoding

- 3.205 Some respondents advised that the proposed text that prevents encoding "for the purpose of obscuring their meaning" could unintentionally prevent security procedures being put in place to ensure only amateurs can use the equipment. Some respondents advised that the current restriction on its use should be expanded beyond the remote control of satellites. They suggested that Ofcom should enable wider use of encryption and that this should be done via an NoV to the licence. Others were concerned that some common commercial patented compression systems would be forbidden under the licence terms.
- 3.206 One respondent commented that the encoding provision appears to conflict with provision 6.9(d) that requires any links used for the remote control of the Radio Equipment to be adequately secure to ensure that no other person is able to control the Radio Equipment. They suggested that remote control links should be allowed to be encrypted.
- 3.207 The definition of encoding set out in the Proposed Amateur Radio Licence was taken from the ITU Radio Regulations for amateur radio. Our consultation did not contain any proposals to further extend this, and non-amateur band links can already be encrypted. In view of respondent concerns about the risks of confusion we plan to change the reference from "encoded" back to "encrypted" to ensure that the provision is clear in the licence.
- 3.208 We would like to make clear that we do not class modes of operation or codecs as a form of encryption, even if they are only available on a commercial basis. This is because they are not designed to make the message unreadable to other radio amateurs.

Making transmissions – broadcast

- 3.209 Most responses, that indicated an objection, raised concerns over our proposal to delete clause 11(4)(c) in the existing Amateur Radio Licence that related to the sending of general reception messages from mailbox or bulletin board. A number of respondents objected to our reasoning that this related to out-of-date technologies with many pointing to renewed interest in packet radio. They argued that this means having the ability to broadcast for these purposes is still necessary. We were also asked if it was possible to future proof these provisions so that they are able to accommodate future modes and operating practices should they arise.
- 3.210 Others advised that the licence permits the deployment of beacons but the text in draft provisions 16 and 17 of the Proposed Amateur Radio licence would not enable this. They asked for clarity between the operation of a radio beacon under provision 11 and making transmissions under provisions 16 and 17.
- 3.211 We note the comments received and will ensure that the licence enables the continued use of these technologies. We also take on board the comments regarding the use of beacons. We therefore plan to introduce text similar to the existing clause 11(4)(c) that permits the sending of messages for general reception. The new provision would allow beacons and data

stations to send one-way messages. This provision would cover existing bulletin board and mailbox forms of operation but also beacons and any other one-way data mode of operation.

Some raised concerns around the inclusion of all RSLs in the licence document

- 3.212 A number of respondents advised that Wales was not included in the list of RSLs contained in the table. Some respondents requested that the table also include RSLs for Shetland and Cornwall.
- 3.213 We would like to reassure licensees that the RSL for Wales was missed in error, and this has now been corrected. Concerning the inclusion of additional RSLs, our position remains that we were not proposing any new permanent RSLs at this time, beyond expanding the optional use of 'E' in England to Foundation and Full licensees.

EMF compliance

- 3.214 Some licensees objected to the continued inclusion of EMF provisions in the licence. The RSGB raised concerns regarding the language featured in the proposed condition 9, in particular the use of 'shall' when referring to ICNIRP guidelines which are not mandatory.
- 3.215 We did not propose any amendments to the provisions relating to EMF from the policy set out in our <u>Implementation of measures to require compliance with international guidelines</u> <u>for limiting exposure to EMF</u> document, published in 2021. Therefore, we are not proposing any changes in this area.

Interpretation

- 3.216 We received a number of comments regarding the some of the definitions in this section of the licence. Some of these comments related to the definition of Responders, Repeaters and Gateways and we have addressed these in paragraphs 3.144 and 3.152 as part of our response to questions 12 and 13.
- 3.217 Some respondents commented that the proposed definition of an Aircraft, although taken from the ITU Chicago Convention, was too complex and should be simplified. Another respondent noted that the term airborne was also not defined in the licence.
- 3.218 We have removed the definition of aircraft as there is currently no UK legal definition and instead will just use the term aircraft. In line with other licences and regulations made by Ofcom we also do not propose to include a specific definition of airborne in the licence.

Schedule 1 bands and powers

- 3.219 A number of respondents identified an error in Table C that listed a frequency band as 185 2000 kHz and noted it should have been 1850 2000 kHz. Another respondent requested that Ofcom should make it clearer where no airborne use is permitted in a band. Finally, it was raised that a definition of PEP is not included in the licence schedule.
- 3.220 We have corrected the error in Table C so that the band is correctly referenced as 1850 kHz. We will also make clear in Schedule 1 of the licence whether airborne use is permitted or not in each band. Licensees will need to adhere to coordination processes already in place.

Additional frequencies

3.221 Some respondents, including the Radio Society of Great Britain (RSGB), requested access to additional frequencies for use by amateur radio. The 5 GHz band (5650 – 5850 MHz) was highlighted as particularly restrictive to UK amateurs, as they are only able to access 70 MHz

- of this band, compared to other European countries where the full frequency range is authorised.
- 3.222 Also raised by some amateurs was the inclusion of the 70.5 71.5 MHz ('70 MHz'), 40 MHz, and 146 MHz frequency bands into the standard licence, for use by the hobby. Regarding 40 MHz, some respondents advised that the Republic of Ireland have allowed access to this band and suggested the UK should also allow it.
- 3.223 As set out in the 2023 Consultation, we are not adding or removing any frequency bands to the licence as part of this review. The amateur radio licence already authorises access to many different bands, and radio amateurs have access to an increasing number of bands as they progress from Foundation, to Intermediate, to Full Licence.
- 3.224 Access to the 70 MHz and 146 MHz bands will remain available to Full and Full (Club) Licences via an NoV.
- 3.225 We will continue to permit access to the 40 MHz band via an <u>Innovation and Trial licence</u> but this is not an Amateur Radio Licence.
- 3.226 Access to the gaps in the 5 GHz band is already authorised under the <u>Wireless Telegraphy</u> (Exemption) Regulations 2021 that references Ofcom Interface Requirement IR2030.

Decision

Given the overwhelming support for the proposed changes to the licence format and terms and conditions we plan to:

- Align the format and conditions of the licence with other spectrum licences that Ofcom issues;
- 2) Update the licence template to simplify and ensure consistency with CEPT Recommendation T/R 61-01;
- 3) Create a new Amateur Conditions Booklet, to implement the changes set out in this document; and
- 4) Simplify or clarify the existing licence terms and conditions.

Taking into account the responses received to these and other questions, we plan to make a number of changes to the licence conditions we proposed as part of the 2023 Consultation. These proposed changes are set out in the draft licence that we have included in Annex 2 of this document.

Other cross cutting issues

3.227 There were some general themes throughout the responses, related to many of the questions, and some comments received that sat outside the scope of the questions asked. As these comments transcend specific proposals, we have dealt with these below.

Licence progression

- 3.228 Many respondents argued that some of our proposals could remove the incentives for Foundation and Intermediate licensees to progress through the licensing tiers. These comments were raised in relation to our proposals to increase the transmit power for radio amateurs at all levels, to allow greater supervised use of radio equipment by others, remote control operation, and our proposals on beacons, gateways, and repeaters. Some respondents suggested setting a limit on how long a radio amateur can hold a Foundation Licence before having to progress.
- 3.229 Several respondents were resistant to increasing the general operating freedoms for Foundation licensees. Comments focused on questioning whether Foundation licensees have the technical know-how to operate under more liberalised conditions, and that some proposals could be seen as 'deskilling' the hobby.
- 3.230 The scope of Ofcom's licensing regime is to issue three classes of individual amateur radio licences Foundation, Intermediate, and Full. These levels are progressive, and a given class of licence is only issued to an applicant who has demonstrated the appropriate level of technical skill through the recognised examination. There is a clear route available for radio amateurs who wish to progress, however it is not the purpose of Ofcom's licensing regime to enforce progression.
- 3.231 By liberalising many of our restrictions, we believe this could help encourage experimentation in the use of radio and may help develop the skills of new and existing radio engineers, whilst also making the hobby more accessible to a wide range of people. It is important to understand that all licensees must operate within the terms and conditions of their licence, failing which Ofcom retains the right to take enforcement action such as revoking their licence, imposing a fine or pursuing criminal prosecution.

Awareness of the consultation

- 3.232 A small number of respondents noted that they weren't aware of the 2023 Consultation publication. They noted that given the importance of the changes set out in the consultation, Ofcom should have made greater effort in communicating with licensees about the proposed changes.
- 3.233 While we understand that some radio amateurs may not have been aware of the consultation when it was first published on the Ofcom website, we followed this with a variety of further communications. These included a notification sent to those that subscribe to the Ofcom mailing list and numerous posts on the various Ofcom social media platforms during the consultation period. The RSGB also played a role in making their stakeholders aware of the consultation via their website, social media channels, clubs, GB2RS and their RadCom magazine. In the September edition of RadCom, Ofcom provided an article outlining the consultation proposals. We are also aware that the proposals were discussed on other amateur radio forums, social media channels and on the air.

4. Impact of our Decisions

Overview and impact assessment of our changes to the amateur radio licence and wider policies

- 4.1 In line with our statutory duties and our responsibility to ensure the optimal use of the radio spectrum, we proposed to make changes to the amateur radio licence and some of our associated policies.
- 4.2 Given that all the proposals in our June 2023 Consultation received majority support, we have decided to proceed with our proposals as planned subject to a few amendments and the outcome of the statutory process to vary all amateur radio licences. The proposed amendments are detailed below:
 - We proposed to allow old call signs to be reissued online, and to enable all licensees
 to change their call signs periodically. Initially we proposed a period of two years
 before a call sign can be reissued or changed. We have made the decision to
 increase this period to five years.
 - As part of our proposal to increase the permitted transmit power for all licensees, we proposed that Foundation licensees would be able to transmit at 20 Watts. Upon considering feedback, we are now proposing to increase the permitted transmit power for Foundation licensees to 25 Watts PEP.
 - We proposed to enable Foundation Licence holders to use the 2.4 GHz and 5 GHz bands at a maximum transmit power of 1 Watt PEP; we have increased the proposed maximum transmit power to 2 Watts PEP in response to feedback.
 - There are a few areas, as explained in section 3, paragraphs 3.188 3.226 where we
 have updated or amended wording in the licence terms and conditions. This is in
 response to suggestions and comments made by respondents, or where there were
 errors.
 - We have introduced a new category of operation in the draft licence to cover data stations that can be used by other radio amateurs without supervision. The provision further liberalises the licence and removes the need for additional NoVs.
 - We have reconsidered the text in Schedule 2⁴⁴ and have decided to remove the text from the licence schedule. We will instead include these provisions in a new Notice of Coordination, which includes the text relating to the coordination of unattended beacons. The new Notice of Coordination will also set out the process for coordination of repeaters with the CAA and MOD.
- 4.3 We consider our proposals and decisions to be:

⁴⁴ Schedule 2 currently sets out additional restrictions which apply to the unattended operation of beacons.

- a) objectively justified in that they are designed to strike the right balance between
 maintaining appropriate regulatory control over spectrum use and licensing to support
 the optimal use of the spectrum, including managing the interference environment and
 ensuring a clearer, more consistent and responsive regime for radio amateurs which
 minimizes administrative burdens and supports innovation;
- b) **not unduly discriminatory** against particular persons or against a particular description of persons in that they apply to all existing, and potential new, amateur radio licensees;
- c) proportionate to what they are intended to achieve, in that our licence conditions aim to ensure that amateur radio users would not be likely to cause undue interference to others, continue to comply with international agreements and reduce the administrative burden. In most areas licensees would be able to continue to operate in a similar way to now, as we are not restricting current operating parameters; and
- d) **transparent** in relation to what they are intended to achieve, in that they are clearly described and explained in this statement.

Impact assessment

- 4.4 Impact assessments provide a valuable way of assessing different options for regulation.

 They form part of best practice policy making. The 2023 Consultation and this document as a whole represents an impact assessment as defined in section 7 of the Communications Act 2003. 45
- 4.5 As initially set out in the 2023 Consultation document, we believed that our proposals are unlikely to have a significant impact on licensees in accordance with section 7 of the Communications Act 2003. These proposed policies will liberalise the amateur radio licence to allow greater operating freedom, provide clarity and remove unnecessary administrative burdens on licensees. As such we expected our proposals to have an overall positive impact.
- 4.6 In preparing the consultation and statement documents and reviewing responses, we have further considered if there are any wider citizen and consumer interests as well those involved in amateur radio. As amateur radio is a non-commercial hobby, we do not believe that the proposed new terms have any significant impact on businesses or the general public. Nor do we believe that they will disproportionately impact people on low incomes or those living in different areas of the UK (including in rural or urban areas) in accordance with section 3(4)(i) and 3(4)(l) of the Communications Act 2003⁴⁶⁴⁷.
- 4.7 We also carefully considered the impact of the proposed new licence framework on other users of the radio spectrum and do not believe there are likely to be any negative impacts from our policies on other authorised spectrum users.
- 4.8 The policies look to relax a number of restrictions previously imposed on licensees. We believe that these changes will provide benefits to the amateur radio community and to Ofcom through reduced administration requirements. Although we note in some cases our changes to the spectrum authorisation rules for amateurs are a move away from existing

⁴⁵ For further information about our approach to impact assessments, see Ofcom's 'Impact Assessment Guidance' on our website.

⁴⁶ Section 3(1)(a) of the Communications Act 2003.

⁴⁷ Section 3(4)(I) of the Communications Act 2003.

- practice, we consider that they will deliver benefits and we have sought to enable licensees to continue to operate in the way to which they are accustomed. For example, licensees are able to continue to use an RSL as part of their call sign if they wish to do so.
- 4.9 Whilst we plan to change the structure and some of the wording in licence, we consider many of these changes to be presentational and administrative in nature. They are mainly intended to (1) update and align the structure and content in the amateur radio licence with those of other licence types that Ofcom issues; and (2) update and remove some of the unnecessary complexity to make it easier to understand. Overall, these changes are intended to simplify the format of the licensing documentation for licensees.
- 4.10 We do not expect any of the new terms and conditions to require licensees to take any additional steps to ensure compliance. If licensees comply with all the previous terms and conditions of their licence, then we believe that they should have no undue difficulty in complying with all the proposed new terms and conditions of their licence.

Equality Impact Assessment

- 4.11 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, gender reassignment, pregnancy and maternity, race, religion or belief, 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.
- 4.12 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 have regard to the desirability of promoting good relations across a range of categories outlined in the 1998 Act.
- 4.13 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.
- 4.14 We have given careful consideration to whether our proposed changes would have a particular impact on persons sharing protected characteristics (broadly including race, age, disability, sex, sexual orientation, gender reassignment, pregnancy and maternity, marriage and civil partnership and religion or belief in the UK and also dependents and political opinion in Northern Ireland), and in particular whether they may discriminate against such persons.
- 4.15 When thinking about equality we think more broadly than persons that share protected characteristics identified in equalities legislation and think about potential impacts on various groups of persons (see paragraph 4.7 of our <u>impact assessment guidance</u>)
- 4.16 In particular, section 3(4) of the Communications Act also requires us to have regard to the needs and interests of specific groups of persons when performing our duties, as appear to us to be relevant in the circumstances. These include:
 - a) the vulnerability of children and of others whose circumstances appear to us to put them in need of special protection;

- b) the needs of persons with disabilities, older persons and persons on low incomes; and
- c) the different interests of persons in the different parts of the UK, of the different ethnic communities within the UK and of persons living in rural and in urban areas.
- 4.17 We do not consider that our proposals will affect any specific groups of persons (including persons that share protected characteristics under the 2010 Act or the 1998 Act) differently to the general population.
- 4.18 The amateur radio licence review aims to produce a simpler and less restricted licence which will be easier to understand than the existing licence and would apply equally to all users. For these reasons, we do not consider that our policies will have negative impacts on any groups sharing protected characteristics⁴⁸. We note that some changes involve the use of online systems to carry out such tasks, however, as with previous practice, <u>alternative</u> accessibility arrangements will be in place to enable all stakeholders to benefit from these policies.

Welsh language impact assessment

- 4.19 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)⁴⁹.
- 4.20 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 think there are ways in which our decisions and proposals could be formulated to have, or increase, a positive impact, or, not have adverse effects or decrease any adverse effects. This is because our planned changes and decisions relate to a nationwide licensing regime and the relevant licence products are available to anyone within the UK.
- 4.21 We note that Ofcom's current practice is to offer to produce spectrum licences in Welsh, and when requested does provide licences in Welsh, in accordance with its obligations set by the Welsh Language Commissioner⁵⁰. Ofcom will continue to take this approach in the future in relation to amateur radio licences.

⁴⁸ Wireless Telegraphy (Content of Transmission) Regulations 1988 will continue to apply to the content of suffixes.

⁴⁹ See Standards 84 – 89 of <u>Hysbysiad cydymffurfio</u> (in Welsh) and <u>compliance notice</u> (in English). Section 7 of the Welsh Language Commissioner's <u>Good Practice Advice Document</u> provides further advice and information on how bodies must comply with the Welsh Language Standards.

⁵⁰ Compliance Notice – Section 44 Welsh Language (Wales) Measure 2011, The Office of Communications, 25 July 2016, paragraph 38.

5. Next steps

Our phased approach to implementation

- 5.1 The decisions set out in this document will not result in any immediate changes to the terms and conditions of amateur radio licences. Many of the decisions set out are subject to the outcome of the statutory processes for vary existing licences.
- 5.2 To implement many of these decisions we first need to make changes to all existing amateur radio licences. We have therefore decided to start the statutory process to vary all amateur radio licence by publishing a General Notice which sets out the proposed licence variations.
- 5.3 Implementing the changes set out in this statement will fall into three main phases owing to the complexity and required system changes:
 - a) Phase 1: changes implemented through a variation process to the amateur radio licence;
 - b) Phase 2: changes that require minor modification to the existing licensing platform or other specific action from Ofcom; and
 - c) Phase 3: changes that require the new licensing platform to be in place⁵¹.
- 5.4 We have indicated which phase each of our planned changes would fall under in Figure 20. These plans may be subject to change, and we will provide further updates on the implementation timelines as required.

Figure 20: Implementation phasing of the policies

Phase 1 (Licence variation required) – by end of February 2024	Phase 2 (Licensing platform modification or other Ofcom action required) - we plan for this to be in 2024	Phase 3 (new licensing platform required) – we plan for this to be later in the 2024/25 financial year
Allow third party supervised operation.	New Intermediate M8 and M9 call sign prefix.	Improvements to the online revalidation process.
RSL use optional and allow wider use of 'E' for England. Special RSL notification. Call sign suffix provisions. Increased transmit power. Foundation and Intermediate use of the internet for remote control links.	Restriction on the number of call signs. Liberalisation of the use of the Special Event Station NoV.	Holding of a single personal licence and revocation of lower licence as a licensee progresses. Choice of wider range of unused amateur call signs via the online portal. Ability to change call sign periodically.

61

⁵¹ There is an ongoing piece of work to move to a new licensing platform to provide a better online process for our stakeholders and to enable us to continue to deliver an efficient spectrum licensing service into the future. As part of the <u>Plan of work 2023/24</u>, we are migrating across some of our simpler licences onto our new platform.

Incorporating beacon, gateway, data and repeater NoVs into the licence.	• •
Allowing Foundation licensees to build their own equipment, and access 2.4 GHz and 5 GHz bands. Permit low power airborne use. Update and alignment of the licence terms and conditions.	and ands. use.

Phase one of implementation: licence variation and revocation processes

- As noted at the outset, many of the decisions set out in this document are subject to the outcome of the statutory process to vary all amateur radio licences, as set out in the WT Act⁵². We have today published our proposals to vary all amateur radio licences. Further detail around the variation can be found in the General Notice published on our website.
- To vary or revoke a licence, we must first let affected licensees know that we are proposing to do this and explain the reasons why. We can do this either by individually contacting affected licensees or by publishing the licence variation proposal on our website. Where we publish a proposal on our website, it is called a General Notice.
- 5.7 As part of this process, we must also:
 - a) allow licensees the opportunity to respond or provide comments on our proposal if they wish to do so; and
 - b) specify a period (generally of at least 30 days) during which licensees can provide any comments they may wish to make.
- As we advised in paragraph 7.22 of the 2023 Consultation, we intend to use the General Notice approach to notify licensees of the variation and do not intend to notify individual licensees. Once the deadline for providing a representation has passed, Ofcom will consider all the representations that have been provided. We will take our final decision within one month of the deadline for providing a representation, letting affected licensees know what we have decided and explaining the reasons for our decision. We can do this by publishing our final decision on our website (which is again called a General Notice). If we do proceed with the licence variation, we will subsequently begin the process of sending licensees their new licence document via their preferred communication method. It would therefore be beneficial for individuals to ensure this information is correct.
- 5.9 The changes would come into effect from when we publish our decision. At the same time, we would replace the Amateur TLC with the Amateur Conditions Booklet. We would then begin contacting licensees to provide them with their new licence document. Due to the volume of licences this process may take some weeks to complete.

⁵² Paragraphs 6 and 7, Schedule 1 of the Wireless Telegraphy Act 2006.

5.10 We would advise that those wishing to be made aware of the publication and progress of the General Notice sign up for <u>Ofcom spectrum updates</u>. We also plan to publicise this on Ofcom's social media platforms as well as with stakeholder representative bodies such as the RSGB.

Other implementation changes we will make

- 5.11 As we have decided, subject to the outcome of the statutory process to vary all amateur radio licences to proceed with the proposals set out in the July 2023 Consultation, we will need to make a number of other changes beyond amending amateur radio licences. These are set out in more detail below.
- 5.12 As part of the wider licensing transformation and LPE implementation work being carried out we may also consult on further proposals for change in due course, if we think this will enable further benefits.

Document updates

5.13 As part of the policy implementation process, we plan to update a range of information that Ofcom publishes. This includes guidance notes, frequently asked questions, NoVs, and other policies relating to amateur radio available on the Ofcom website.

Amateur examination and syllabus

5.14 We are liaising with RSGB's <u>Examinations Standards Committee</u> and <u>Exams and Syllabus</u>
<u>Review Group</u> to discuss any changes required to the exam syllabus and question bank relating to licence conditions⁵³.

Statutory Instrument for visiting amateurs

- 5.15 We will update the Wireless Telegraphy (Reciprocal Exemption of European Radio Amateurs)
 Regulations 1988. These allow the holder of an amateur radio licence, issued by a country
 that has implemented CEPT Recommendation T/R 61—01, to use their radio equipment in
 the UK for up to three months without the need to hold a licence issued from Ofcom.
- 5.16 They have not been updated since they were made in 1988 and retain superfluous text and obsolete references, for example to the old terms and conditions booklet BR68 which was replaced a number of years ago. They also authorise the use of radio equipment only as provided for in CEPT Recommendation T/R 61-01. This does not include use of equipment by radio amateurs from countries with which the UK has bilateral reciprocal agreements.
- 5.17 Before making any such regulations (including regulations which modify or revoke existing regulations), we are required by section 122(4) of the WT Act to give statutory notice of our proposal to do so. Under section 122(5), such notice must state that we propose to make the regulations in question, set out their general effects, specify an address from which a copy of the proposed regulations or order may be obtained, and specify a time period of at least one month during which any representations with respect to the proposal must be made to us.

_

⁵³ Ofcom oversees the examination system through the Exam Standards Committee.

A1. Legal Framework

The legislative framework

- A1.1 Ofcom's statutory powers and duties in relation to spectrum management are set out primarily in the <u>Communications Act 2003</u> (the "2003 Act") and the <u>Wireless Telegraphy Act 2006</u> (the "WT Act").
- A1.2 Amongst our functions are the making available of frequencies for use for particular purposes and the granting of rights of use of spectrum through wireless telegraphy licences and licence exemptions.
- A1.3 Our principal duties under the 2003 Act, when carrying out our functions and exercising our powers, are to further the interests of citizens and consumers, where appropriate by promoting competition. In doing so, we are also required (among other things) to secure the optimal use of spectrum and the availability throughout the United Kingdom of a wide range of electronic communications services.
- A1.4 We must also have regard to:
 - a) the desirability of promoting competition in relevant markets;
 - b) the desirability of encouraging investment and innovation in relevant markets;
 - c) 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
 - d) the different interests of persons in the different parts of the United Kingdom, of the different ethnic communities within the United Kingdom and of persons living in rural and in urban areas.
- A1.5 In performing our duties, we are required under section 3(3) of the 2003 Act to have regard in all cases to the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed, and any other principles appearing to Ofcom to represent the best regulatory practice.
- A1.6 Additionally, in carrying out our spectrum functions we have a duty under section 3 of the WT Act to have regard in particular to:
 - a) the extent to which the spectrum is available for use, or further use, for wireless telegraphy;
 - b) the demand for use of that spectrum for wireless telegraphy; and
 - c) the demand that is likely to arise in future for such use.
- A1.7 We also have a duty to have regard to the desirability of promoting:
 - a) the efficient management and use of the spectrum for wireless telegraphy;
 - b) the economic and other benefits that may arise from the use of wireless telegraphy;
 - c) the development of innovative services; and
 - d) competition in the provision of electronic communications services.

Ofcom's licensing framework

- A1.8 Ofcom is responsible for authorising use of the radio spectrum. We permit the use of the radio spectrum either by granting wireless telegraphy licences under the WT Act or by making regulations exempting the use of particular equipment from the requirement to hold such a licence. It is unlawful and an offence to install or use wireless telegraphy apparatus without holding a licence granted by Ofcom, unless the use of such equipment is exempted.⁵⁴
- A1.9 The proposals and decisions set out in this document concern (among other things) our approach to existing amateur radio licensees and the licence conditions to be included in any future licence. Below we explain the legal framework under which we can impose conditions in new spectrum licences and revoke or vary existing licences.

Licence conditions

- A1.10 A wireless telegraphy licence may be granted subject to such terms, provisions and limitations as Ofcom think fit (WT Act, s. 9(1)). However, this power is subject to certain constraints. In particular:
 - a) the terms, provisions and limitations of a spectrum licence must not duplicate the obligations already imposed on the licensee by the general conditions set by Ofcom under section 45 of the Communications Act 2003 (WT Act, s. 9(6));⁵⁵ and
 - b) Ofcom may only impose terms, provisions and limitations which are: a) objectively justified in relation to the network and services to which they relate; b) not unduly discriminatory; c) proportionate to what they are intended to achieve; and d) transparent in relation to what they are intended to achieve (WT Act, s. 9(7)).
- A1.11 Section 9(4) of the WT Act sets out a non-exhaustive list of the terms, provisions and limitations that Ofcom may impose.
- A1.12 Examples of conditions that we may impose in spectrum licences under s.9 WT Act include:
 - a) limitations as to the position and nature of a station (s.9(2)(a));
 - b) limitations as to the apparatus that may be installed or used (s.9(3)); and
 - c) terms, provisions and limitations as to strength or type of signal, as to times of use and as to the sharing of frequencies (s.9(4)(a)).

Ofcom's powers to vary or revoke licences granted under the WT Act

A1.13 Ofcom has a broad discretion under paragraph 6 of Schedule 1 of the 2006 Act to vary or revoke licences, subject to certain limitations. Specifically, the legislation provides that Ofcom may not vary or revoke a licence unless the proposed variation or revocation is objectively justifiable (WT Act 2006, para. 6A of Sch. 1). We also have a general duty not to discriminate unduly between operators and to ensure that our interventions are

⁵⁴ Section 8 of the WT Act.

⁵⁵ See Ofcom's General Conditions of Entitlement.

proportionate, consistent and targeted only at cases in which action is needed (2003 Act, s.3(3)). Ofcom must act in accordance with its statutory duties and general legal principles, including the duties to act reasonably and rationally when making decisions and to take account of any legitimate expectations.⁵⁶

- A1.14 Schedule 1 of the WT Act set out the process which Ofcom must follow where it proposes to vary or revoke a wireless telegraphy licence. In summary, Ofcom is required to take the following steps (WT Act, para. 7 of Sch. 1):
 - a) notify the licensee of the reasons for the proposed variation or revocation;
 - b) specify a period of at least 30 days in which the licensee may make representations about the proposal; and
 - c) decide whether or not to vary or revoke the licence within one month of the end of that period.
- A1.15 Where a proposal to vary or revoke a wireless telegraphy licence is made with the consent of the licensee, Ofcom is not required to follow the above process.
- A1.16 Ofcom may include in a wireless telegraphy licence terms restricting the exercise of its power to revoke or vary licences (WT Act, para. 8 of Sch. 1), such as requiring a certain notice period for revoking a licence for spectrum management reasons. However, Ofcom may at any time revoke or vary a licence if it appears to be necessary or expedient in the interests of national security, or for the purpose of securing compliance with an international obligation (WT Act, para. 8(5) of Sch. 1).

⁵⁶ Further potential limitations may derive from (i) any UK obligations under international agreements, particularly where use of spectrum has been harmonised, and (ii) any ministerial direction under section 5 of the 2003 Act or section 5 of the WT Act.

A2. Draft licence

- A2.1 The following text contains the proposed changes to the amateur radio licence and its terms and conditions, following the decisions set out in this statement.
- A2.2 Due to the reformatting of the structure of the licence documentation, it has not been possible to provide a full tracked change version of the proposed licence and its terms and conditions compared to the previous licence.
- A2.3 We have however illustrated in the document the changes to the wording we proposed:
 - a) New text based on existing standard terms and conditions set out in other Ofcom Wireless Telegraphy Act 2006 licences this is highlighted green and underlined.
 - b) New text to implement the proposed policy changes or amend existing text this is highlighted yellow and in bold.
 - c) Changes we have made to the licence conditions as a result of comments received to the 2023 Consultation or minor administrative amendments – this text is highlighted turquoise and in italic bold red.
- A2.4 Where the text is not highlighted, this indicates that the provisions were already in the existing licence and its terms and conditions.
- A2.5 The existing amateur radio licence terms and conditions are available on our website.

Amateur Radio Licence

Amateur Radio

Licence

Licence de radio amateur Amateurfunklizenz

United Kingdom of Great Britain & Northern Ireland, the Channel Islands & the Isle of Man

Royaume–Uni de Grande Bretagne et d'Irlande du Nord, les Îles Anglo-Normandes et L'Île de Man

Vereinigte Königreich von Großbritannien und Nordirland, die Kanalinseln und die Isle of Man

Wireless Telegraphy Act 2006

Législation sur la télégraphie sans fil 2006 Gesetz über drahtlose Telegrafie 2006

Licence details

Renseignements sur la licence Lizenzdetails

Licence class	
Classe de licence	
Lizenzklasse	
CEPT equivalent licence class	
Classe de licence CEPT équivalente	
Entsprechende CEPT Klasse	
Licensee's name*	
Nom du titulaire	
Name des Lizenzinhabers	
Club name	
Nom du club	
Name des Klubs	
Callsign	
Indicatif d'appel	
Rufzeichen	
Mailing address	
Adresse postale	
Postanschrift Postanschrift	
Main Station Address	
Adresse de station principale	
Hauptstationsanschrift	
Issue date <mark>of this</mark>	
version	
Date de délivrance	
Ausstellungsdatum	

First issue date	
Première date de délivrance	
Erstausstellungsdatum	
Licence number	
Numéro de licence	
Lizenznummer	

- 1. This Licence is issued by the Office of Communications ("Ofcom") and replaces any previous authority granted in respect of the service subject to this Licence by Ofcom or by the Secretary of State.
- This Licence authorises the licence holder named above ("the Licensee") to establish, install and/or use radio transmitting and/or radio apparatus as described in the schedule(s) (together called "the Radio Equipment") subject to the terms set out below and subject to the terms of the Amateur Radio Wireless Telegraphy Licence Conditions Booklet OFW611.
- 3. If this Licence is a Full Licence, the Licensee is authorised to operate in countries which have implemented CEPT Recommendation T/R 61-01. If the Licensee is operating under the provisions of CEPT Recommendation T/R 61-01, the Licence must be available for inspection by the authorities in that country.
- Cette licence est délivrée par l'Office of Communications ("Ofcom") et remplace toute autorisation antérieure accordée concernant le service soumis à cette licence par l'Ofcom ou par le Secrétaire d'État.
- 2. Cette licence autorise autorise le titulaire de licence nommé ci-dessus ("le titulaire") à établir, installer et/ou utiliser des appareils radio et/ou de transmission radio comme décrit dans l'annexe ou les annexes (ensemble appelés « l'équipement radio ») à cette licence, sous réserve des conditions énoncées ci-dessous et soumises aux conditions du Livret des conditions de licence de radioamateur et de télégraphie sans fil OFW611.
- 3. Si cette licence est une licence complète, le titulaire est autorisé à opérer dans les pays qui ont mis en œuvre la recommandation T/R 61-01 de la CEPT. Si le titulaire de licence opère conformément aux dispositions de la Recommandation CEPT T/R 61-01, la licence doit être disponible pour inspection par les autorités de ce pays.
- Diese Lizenz wird vom Office of Communications ("Ofcom") ausgestellt und ersetzt alle früheren Genehmigungen, die Ofcom oder der Außenminister in Bezug auf den Dienst, der dieser Lizenz unterliegt, erteilt haben.
- Diese Lizenz ermächtigt den oben genannten Lizenzinhaber ("der Lizenznehmer"),
 Funkübertragungs- und/oder Funkgeräte wie in den Anhängen beschrieben (ingesamt
 "die Funkausrüstung" genannt) einzurichten, zu installieren und/oder zu verwenden,
 vorausgesetzt dass die unten aufgeführten Bedingungen und die Bedingungen des
 Amateur Radio Wireless Telegraphy Licence Conditions Booklet OFW611. eingehalten
 werden.
- 3. Wenn es sich bei dieser Lizenz um eine Volllizenz handelt, ist der Lizenznehmer berechtigt, in Ländern zu operieren, die die CEPT-Empfehlung T/R 61-01 umgesetzt haben. Wenn der Lizenznehmer gemäß den Bestimmungen der CEPT-Empfehlung T/R 61-01 tätig ist, muss die Lizenz den Behörden in diesem Land zur Einsichtnahme zur Verfügung stehen.

Proposed Amateur Radio General Licence Conditions Booklet

- A2.6 Due to the reformatting of the structure of the licence documentation, it has not been possible to provide a full tracked change version of the licence and its terms and conditions.
- A2.7 We have however illustrated in the document any changes to the wording:
 - a) New text based on existing standard terms and conditions set out in other Ofcom Wireless Telegraphy Act 2006 licences this is highlighted green and underlined.
 - b) New text to implement the proposed policy changes or amend existing text as set out in the 2023 Consultation this is highlighted yellow and in bold.
 - c) Changes made to the drafting following publication of the 2023 Consultation this is highlighted in turquoise, red and bold text.
- A2.8 Where the text is not highlighted, this indicates that the provisions were already in the existing licence and its terms and conditions.
- A2.9 The existing amateur radio licence terms and conditions are available on our website.

Condition 1 - Licence Term, Variation and Revocation

- The Licence shall continue in force until revoked by Ofcom or surrendered by the Licensee or until the Licensee is granted an Amateur Radio Licence at a higher class.
- 2. Pursuant to schedule 1 paragraph 8 of the Wireless Telegraphy Act 2006 ("the Act")
 Ofcom may not revoke this Licence under schedule 1 paragraph 6 except:
 - a) at the request of, or with the consent of, the Licensee;
 - b) if there has been a breach of any of the conditions of the Licence;
 - c) in accordance with schedule 1 paragraph 8(5) of the Act;
 - d) if it appears to Ofcom to be necessary or expedient to revoke the Licence for the purposes of complying with a direction by the Secretary of State given to Ofcom under section 5 of the Act or section 5 of the Communications Act 2003; or
 - e) for reasons related to the management of the radio spectrum, provided that in such cases the power to revoke may only be exercised after first giving:
 - I. reasonable notice to the Licensee; or
 - II. in the case of 2310-2350 MHz, 2390-2400 MHz and 3400-3410 MHz three (3) months' notice to the Licensee.
 - f) Where the licensee holds more than one personal Amateur Radio licence of any class (or class) issued by Ofcom;
 - g) where the Licensee has not, in the course of the past five years, updated the contact details held by Ofcom or confirmed, that these details are correct;
 - h) If the Licence is a Full (Club) Licence and the Licensee no longer represents the club named above; or

- i) Where the Licensee has been convicted of an offence under the Wireless Telegraphy Act.
- 3. Where Ofcom exercise their power to revoke or vary the Licence in accordance with schedule 1 paragraph 6 of the Act, the Licensee shall be notified in writing or by a general notice. Any general notices will be posted on the Ofcom website.

Condition 2 - Changes

- 1. The Licence may not be transferred.
- 2. The Licensee must give immediate notice to Ofcom in writing of any change to the Licensee's name and address from that recorded on the Licence.

Condition 3 - Licence Fee

- 1. The Licensee shall pay to Ofcom the relevant sums as provided in section 12 of the Act and the regulations made thereunder:
 - a) on or before the date of issue of the Licence; and
 - b) on or before the payment date shown on the Licence for subsequent payments or such other date or dates as shall be notified in writing to the Licensee, in accordance with those regulations and any relevant terms, provisions and limitations of the Licence.

Condition 4 - Geographical Boundaries

- 1. The Licensee is authorised to establish, install and use the Radio Equipment in and over the United Kingdom, the Channel Islands and the Isle of Man in each case including their territorial sea.
- If the Licence is a Full Licence, then the Licensee may also operate the Radio Equipment on the High Seas.

Condition 5 - Coordination

1. The Licensee shall ensure that the Radio Equipment is operated in compliance with such coordination procedures as may be notified to the Licensee by Ofcom.

Condition 6 - Radio Equipment Use

- 1. The Licensee must ensure that the Radio Equipment is constructed, established, installed and used only in accordance with the provisions specified in the Licence.
- 2. The Licensee shall ensure that the Radio Equipment is designed, constructed, maintained and used so that its use does not cause any Undue Interference to any wireless telegraphy.

_

⁵⁷ https://www.ofcom.org.uk/

3. The Licensee shall ensure that the establishment, installation, modification or use of the Radio Equipment is carried out in accordance with the restrictions set out in Condition 9 of this Licence in relation to electromagnetic field (EMF) exposure.

Purpose

- 4. The Licensee must ensure that the Radio Equipment is only used:
 - a) for the purpose of self-training in radio communications, including conducting technical investigations; or
 - b) as a leisure activity and not for commercial purposes of any kind
- 5. The Licensee may use or permit the use of the Radio Equipment to assist with communications:
 - a) in times of disaster or *local*, national, or international emergency;
 - b) to support operations conducted by a user service; or
 - c) during any exercise relating to a and b.

Persons who may operate the radio equipment

- 6. The Radio Equipment may be used by the Licensee or by any person who has the permission of the licensee to do so and who is under the direct supervision of the Licensee.
- 7. If the Licence is a Full (Club) Licence, the Radio Equipment may be used:
 - a) unsupervised, by the holder of a Full Licence who has the permission of the licensee to do so; or
 - b) by any person who is under the direct supervision of the holder of a Full Licence whom the Licensee has granted permission to do so.
- 8. The Radio Equipment may be used by a Category 1 or 2 Responder ("Responder/User Service during any operation or exercise conducted by a Responder.
- 9. When the Radio Equipment is used by a person other than the Licensee, the Licensee:
 - a) must ensure all users are made aware of and comply with the terms, conditions and limitations of the Licence; and
 - b) remains responsible for the operation of the Radio Equipment and compliance with the terms, conditions and limitations of the Licence.

Remote control operation

- 10. The Licensee must ensure that, when operating the Radio Equipment by Remote Control:
 - any links used for the remote control of the Radio Equipment must be adequately secure so as to ensure that no other person is able to control the Radio Equipment;
 - remote control links using Amateur Radio frequencies must use frequency bands above 30 MHz;

- transmissions from the Radio Equipment can be terminated immediately promptly; and
- d) the Licence Number (as specified above) must be displayed on or next to any unattended Radio Equipment located other than at the main station address.

Unattended operation

- 11. The Licensee must ensure that, when deploying Radio Equipment for Unattended Operation:
 - a) any links used for the remote control of the Radio Equipment must be adequately secure so as to ensure that no other person is able to control the Radio Equipment;
 - b) transmissions from the Radio Equipment can be terminated promptly; and
 - c) the Licence Number No (as specified above) is displayed on or next to any unattended Radio Equipment located other than at the main station address.

Radio beacon operation

- 12. Radio Equipment may be operated as a Radio Beacon providing that the Licensee:
 - a) only transmits on the frequency bands and at the locations set out in Schedule 2
 of the Licence;
 - transmits in accordance with any restrictions as notified by Ofcom;
 - c) transmits at powers no greater than 5 Watts ERP;
 - d) is able to demonstrate that reasonable steps have been taken to minimise the risk of the Radio Beacon causing undue interference to other authorised uses of radio and provide evidence of this, if requested to do so by Ofcom; and
 - e) is able to close down the Radio Beacon Station within two hours of being required to do so by Ofcom.
- 13. Where this is a Full Licence, Full (Club) Licence or Full (Temporary Reciprocal) Licence, the Radio Equipment may be used as a Radio Beacon at powers greater than 5 Watts but no more than 25 Watts ERP providing that the Licensee ensures that the beacon is identified using the call sign allocated and published by the Radio Society of Great Britain or any other body stipulated by Ofcom.

Gateway operation

- 14. The Radio Equipment may be used as a Gateway and may be operated (but not controlled) by other radio amateurs without supervision, providing that the Licensee:
 - a) ensures that the Gateway transmits at powers no greater than 5 Watts ERP;
 - b) is able to demonstrate that reasonable steps have been taken to minimise the risk of the Gateway causing undue interference to other authorised uses of radio and provide evidence of this if requested by Ofcom;

- c) takes all reasonable steps to ensure that the Gateway is only used by an Amateur; and
- d) is able to close down the Gateway within two hours of being required to do so by Ofcom;
- e) remains responsible for the operation of the Gateway and compliance with the terms, conditions and limitations of the Licence; and
- f) anyone wishing to establish a link to a Repeater must have the written permission of the Repeater keeper to do so.

Repeater operation

- 15. Where this is an Intermediate, Full, Full (Club) or Full (Temporary Reciprocal) Licence, the Radio Equipment may be used as a Repeater and may be operated (but not controlled) by other radio amateurs without supervision, providing that the Licensee:
 - a) transmits in accordance with any restrictions as notified by Ofcom;
 - b) Ensures that the Repeater transmits at powers no greater than 5 Watts ERP;
 - c) does not operate in a frequency band below 28 MHz;
 - d) is able to demonstrate that reasonable steps have been taken to minimise the risk of the Repeater causing undue interference to other authorised uses of radio and provide evidence of this if requested by Ofcom;
 - e) is able to close down the Repeater within two hours of being required to do so by Ofcom;
 - f) takes all reasonable steps to ensure that the Repeater is only used by an Amateur; and
 - g) remains responsible for the operation of the Repeater and compliance with the terms, conditions and limitations of the Licence.
- 16. Where this is a Full, Full (Club) or Full (Temporary Reciprocal) Licence, the Radio Equipment may be used as a Repeater Station at powers greater than 5 Watts but no more than 25 Watts ERP, providing that the Licensee:
 - a) transmits in accordance with any restrictions as notified by Ofcom;
 - b) does not operate in a frequency band below 28 MHz;
 - ensures that the Repeater is identified using the call sign allocated and published by the Radio Society of Great Britain or any other body stipulated by Ofcom for that purpose;
 - d) is able to demonstrate that reasonable steps have been taken to minimise the risk of the Repeater causing undue interference to other authorised uses of radio and provide evidence of this if requested by Ofcom;
 - e) is able to close down the Repeater within two hours of being required to do so by Ofcom;
 - f) takes all reasonable steps to ensure that the Repeater is only used by an Amateur; and

g) remains responsible for the operation of the Repeater and compliance with the terms, conditions and limitations of the Licence; and

Data station operation

- 17. The Radio Equipment may be used as a Data Station and may be operated (but not controlled) by other radio amateurs without supervision, providing that the Licensee:
 - a) transmits in accordance with any restrictions as notified by Ofcom;
 - b) ensures that the Data Station transmits at powers no greater than 5 Watts ERP;
 - is able to demonstrate that reasonable steps have been taken to minimise the risk of the Data Station causing undue interference to other authorised uses of radio and provide evidence of this if requested by Ofcom;
 - d) is able to close down the Data Station within two hours of being required to do so by Ofcom;
 - e) takes all reasonable steps to ensure that the Data Station is only used by an Amateur; and
 - f) remains responsible for the operation of the Data Station and compliance with the terms, conditions and limitations of the Licence; and
- 18. Where this is an Intermediate, Full, Full (Club) or Full (Temporary Reciprocal) Licence, the Radio Equipment may be used as a Data Station at powers greater than 5 Watts but no more than 25 Watts ERP, providing that the Licensee:
 - a) transmits in accordance with any restrictions as notified by Ofcom;
 - ensures that the Data Station is identified using the call sign allocated and published by the Radio Society of Great Britain or any other body stipulated by Ofcom for that purpose;
 - c) is able to demonstrate that reasonable steps have been taken to minimise the risk of the Data Station causing undue interference to other authorised uses of radio and provide evidence of this if requested by Ofcom.
 - d) is able to close down the Data Station within two hours of being required to do so by Ofcom;
 - e) takes all reasonable steps to ensure that the Data Station is only used by an Amateur; and
 - f) remains responsible for the operation of the Data Station and compliance with the terms, conditions and limitations of the Licence.

Making transmissions

- 19. Unless the Radio Equipment is being used for the purposes of clause 5to support a Responder, the Licensee must ensure that:
 - a) Transmissions are only addressed to one or more amateur radio station(s);
 - b) Transmissions between amateur stations are not encoded-encrypted for the purpose of obscuring their meaning, except for control signals exchanged

between earth command stations and space stations in the amateur-satellite service.

- 20. The Licensee may not make transmissions (either directly or for onward transmission by another station) for general reception other than:
 - a) initial calls; or
 - b) transmissions to groups or networks of three or more Amateurs as long as communication is first established separately with at least one Amateur in any such group.
 - Messages transmitted by a Beacon or via a Data Station for reception by Amateurs.

Identification

- 21. The licensee that shall ensure that:
 - a) the station is clearly identifiable at all times;
 - b) the call sign is transmitted as frequently as is practicable during transmissions; and
 - c) the Call sign is given in voice or other appropriate format consistent with the mode of operation.
- 22. Unless the Licence is an Intermediate Licence with a call sign beginning with a 2, a 'Regional Secondary Locator' ('RSL') may be inserted into the transmitted call sign, as a new, additional, second character.
- 23. If the Licence is an Intermediate Licence with a call sign beginning with a 2, a RSL must be inserted into the transmitted call sign, as a new, additional, second character.
- 24. Where an RSL is used, it must be one of the following:

Region	All licences	Full (Club) Licence only
England	Е	Х
Guernsey	U	Р
Isle of Man	D	Т
Jersey	J	Н
Northern Ireland	I	N
Scotland	M	S
Wales	w	C

- 25. The Licensee may, if notified by Ofcom, insert into the transmitted call sign any additional character, in place of an RSL, as specified by Ofcom.
- 26. Any suffix, following the 'slash' symbol ('/') may be added to the transmitted call sign.

Condition 7 - Access and Inspection

- 1. The Licensee shall permit any person authorised by Ofcom:
 - a) to have access to the Radio Equipment; and
 - b) to inspect the Licence and Radio Equipment, at any and all reasonable times or, when in the opinion of that person an urgent situation exists, at any time to ensure that the Radio Equipment is being used in accordance with the terms of the Licence.

Condition 8 - Modification, Restriction and Closedown

- A person authorised by Ofcom may require the Radio Equipment, or any part thereof, to be modified or restricted in use, or temporarily or permanently closed down immediately if in the opinion of the person authorised by Ofcom:
 - a) a breach of the Licence has occurred; and/or
 - b) the use of the Radio Equipment is causing or contributing to Undue Interference to the authorised use of other radio equipment.
- 2. Ofcom may require the Radio Equipment to be modified or restricted in use, or temporarily closed down either immediately or on the expiry of such period as may be specified in the event of a national or local state of emergency being declared. Ofcom may only exercise this power after a written notice is served on the Licensee or a general notice applicable to holders of a named class of Licence is published.
- On a ship or aircraft, the Licensee may operate the Radio equipment only with the agreement of the captain or the person for the time being in control of the ship or aircraft.
- 4. If required by a person authorised by Ofcom, the Licensee shall keep a permanent record (a "log") of such matters concerning the operation of the Radio Equipment, over such period, and in such form, as the authorised person may require.

Condition 9 – Electromagnetic Fields (EMF) Compliance

Sites which are not shared with another licensee

1. The Licensee shall only establish, install, modify or use Relevant Radio Equipment if the total electromagnetic field exposure levels produced by the Licensee's On-Site Radio Equipment do not exceed the basic restrictions⁵⁸ in the relevant tables for general public exposure identified in the ICNIRP Guidelines⁵⁹ in any area where a member of the general public is or can be expected to be present when transmissions are taking place.

⁵⁸ Compliance with the reference levels for general public exposure identified in the ICNIRP Guidelines will ensure compliance with the basic restrictions.

⁵⁹ The relevant tables for general public exposure are identified in Ofcom's "<u>Guidance on EMF Compliance and</u> Enforcement".

Sites which are shared with another licensee

- 2. In the case of a shared site where the Shared Site Exemption applies to the Licensee, the Licensee shall comply with paragraph 1 above.
- 3. In the case of a shared site where the Shared Site Exemption does not apply to the Licensee, the Licensee shall only establish, install, modify or use the Relevant Radio Equipment if:
 - a) the total electromagnetic field exposure levels produced by the Licensee's On-Site Radio Equipment, together with
 - the total electromagnetic field exposure levels produced by all other wireless telegraphy stations and wireless telegraphy apparatus operated by another licensee on the same site for which the Licensee can reasonably assume that a Shared Site Exemption does not apply,

do not exceed the basic restrictions 60 in the relevant tables for general public exposure identified in the ICNIRP Guidelines 61 in any area where a member of the general public is or can be expected to be present when transmissions are taking place.

Emergency situations

4. The obligations in paragraphs 1, 2 and 3 above will not apply if the Relevant Radio Equipment is being used for the purpose of seeking emergency assistance or reporting and responding to an emergency situation (in the vicinity of that situation) including for search and rescue activities and maritime emergency communications.⁶²

Relationship with authorised transmission levels

5. The Licensee shall comply with paragraphs 1, 2 and 3 above notwithstanding the maximum transmission levels authorised in the Licence.

Records

6. The Licensee shall keep, or shall procure that a third party shall keep, and shall make available to Ofcom on request, records (including the type of records identified in Ofcom's "Guidance on EMF Compliance and Enforcement") that demonstrate how it has complied with paragraphs 1, 2 and 3 above when Relevant Radio Equipment is established, installed, modified or used.

Ofcom's "Guidance on EMF Compliance and Enforcement"

7. When evaluating its compliance with paragraphs 1, 2 and 3 above, the Licensee shall

⁶⁰ Compliance with the reference levels for general public exposure identified in the ICNIRP Guidelines will ensure compliance with the basic restrictions.

⁶¹ The relevant tables for general public exposure are identified in Ofcom's "<u>Guidance on EMF Compliance and</u> Enforcement".

⁶² Further information on emergency situations is set out in Ofcom's "<u>Guidance on EMF Compliance and</u> Enforcement".

take into account Ofcom's "Guidance on EMF Compliance and Enforcement" that is in force at the relevant time.

Condition 10 – Interpretation

- 1. In this Booklet and in the Licence:
 - a) the establishment, installation and use of the Radio Equipment shall be interpreted as establishment and use of stations and installation and use of apparatus for wireless telegraphy as specified in section 8 of the Act.
 - b) "Amateur" means a person duly authorised to operate an amateur radio station.
 - c) "Aircraft" means any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface.
 - c) "Call sign" means the unique group of alphanumeric characters, specified in this licence or allocated by another body stipulated by Ofcom and used to identify the Radio Equipment.
 - d) "CEPT Recommendation T/R 61-01" means the European Conference of Postal and Telecommunications Administrations (CEPT) recommendation on CEPT Radio Amateur Licence.
 - e) "Data Station" means radio equipment that transmits or receives data;
 - f) "dBi" means the ratio in dB (decibel) when comparing the gain of the antenna to the gain of an isotropic antenna. An isotropic antenna is a theoretical antenna which radiates power uniformly in all directions.
 - g) "EIRP" means equivalent isotropically radiated power which is the product of the power supplied to an antenna and the absolute or isotropic antenna gain in a given direction relative to an isotropic antenna.
 - h) "ERP" means effective radiated power which is the product of the power supplied to an antenna and its gain in a given direction relative to a half-wave dipole.
 - i) "Foundation Licence" means a Licence issued to an Amateur who is the holder of a Radio Amateurs' Examination Pass Certificate which confirms that the holder has achieved the appropriate level of competence required by Ofcom to be issued with a Foundation Licence.
 - j) "Full Licence" means a Licence issued to an Amateur who is the holder of a Radio Amateurs' Examination Pass Certificate which confirms that the holder has achieved the appropriate level of competence required by Ofcom to be issued with a Full Licence.
 - k) "Full (Club) Licence" means a Licence issued to an Amateur who is the holder of a separate Full Licence and who represents a Club.
 - I) "Full (Temporary Reciprocal) Licence" means a licence issued to a person who holds an amateur radio Licence issued by a foreign administration recognised by Ofcom and which confirms that the holder has achieved the appropriate level of competence required by Ofcom.

- m) "Gateway" means radio equipment that transmits and receives on a single frequency-for the purpose of connecting to other non-amateur networks.
- n) "General public" means any person who is not: (a) the Licensee, owner, operator or installer of the Relevant Radio Equipment; or (b) acting under a contract of employment or otherwise acting for purposes connected with their trade, business or profession or the performance by them of a public function. ⁶³
- o) "High Seas" means all parts of the sea that are not included in the UK territorial sea or in the internal waters of a State.
- o) "ICNIRP Guidelines" means the version of the Guidelines published by the International Commission on Non-Ionizing Radiation Protection for limiting exposure to electromagnetic fields which are identified in Ofcom's "Guidance on EMF Compliance and Enforcement" that is in force at the relevant time. 64
- p) "Inspect" includes examine and test.
- q) "Intermediate Licence" means a licence issued to an Amateur who is the holder of a Radio Amateurs' Examination Pass Certificate which confirms that the holder has achieved the appropriate level of competence required by Ofcom to be issued with an Intermediate Licence.
- r) "Licensee's On-Site Radio Equipment" means the Relevant Radio Equipment and any other wireless telegraphy station(s) and wireless telegraphy apparatus on the same site which transmits at powers higher than 10 Watts EIRP or 6.1 Watts ERP. 65

⁶³ There is pre-existing health and safety legislation which already requires employers to protect workers from exposure to electromagnetic fields ("EMF") including the following legislation specifically relating to EMF (as amended from time to time): The Control of Electromagnetic Fields at Work Regulations 2016, The Control of Electromagnetic Fields at Work Regulations (Northern Ireland) 2016 and The Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Electromagnetic Fields) Regulations 2016.

⁶⁴ Ofcom's "Guidance on EMF Compliance and Enforcement" will initially require the Licensee to comply with the ICNIRP Guidelines for limiting exposure to time-varying electric, magnetic and electromagnetic fields (up to 300 GHz), published in: Health Physics 74(4):494-522, dated April 1998 and available at: https://www.icnirp.org/cms/upload/publications/ICNIRPemfgdl.pdf ("1998 Guidelines") or the ICNIRP Guidelines for limiting exposure to electromagnetic fields (100 KHz to 300 GHz), published in: Health Physics 118(5): 483–524; 2020 and available at: https://www.icnirp.org/cms/upload/publications/ICNIRPrfgdl2020.pdf [accessed: 6 November 2023]

^{(&}quot;2020 Guidelines"). However, once work on the relevant standards explaining the methodology for assessing compliance with the 2020 Guidelines has progressed sufficiently, Ofcom will publish a public consultation on updating its "Guidance on EMF Compliance and Enforcement" to explain that going forward Ofcom will be requiring the Licensee to comply with the 2020 Guidelines only. Following this public consultation, Ofcom will publish an updated version of Ofcom's "Guidance on EMF Compliance and Enforcement" on its website.

Ofcom will follow the same process for any subsequent versions of the ICNIRP Guidelines.

⁶⁵ 10 Watts EIRP is equivalent to 6.1 Watts ERP. In linear units EIRP (W) = 1.64 x ERP (W); in decibels EIRP (dB) = ERP (dB) + 2.15. Ofcom's "Guidance on EMF Compliance and Enforcement" explains how the Licensee can determine if wireless telegraphy station(s) or wireless telegraphy apparatus "transmits at powers higher than 10 Watts EIRP or 6.1 Watts ERP".

- s) "Peak Envelope Power (PEP)" is the average power supplied to the antenna by a transmitter during one radio frequency cycle at the crest of the modulation envelope taken under normal operating conditions.
- t) "Radio Amateurs' Examination Pass Certificate" means an original certificate issued by an examination body which is recognised by Ofcom, which confirms that that person named on the certificate has achieved the level of competence required to hold either a Full, Intermediate or Foundation Amateur Radio Licence issued by Ofcom.
- "Radio Beacon" means automatic transmitting-only Radio Equipment which is operated by the Licensee for the purposes of determining radio propagation characteristics; position reporting; direction finding or other telemetry.
- v) "Radio Equipment" means the radio equipment specified in the Licence.
- w) "Regional Secondary Locator" means a letter, that is inserted after the initial character of the call sign assigned under the Licence, to convey the location of the Radio Equipment.
- x) "Remote Control Operation" means the Radio Equipment which transmits at a different location from the Licensee but is at all times under their direct control via a remote control link.
- y) "Repeater" means Radio Equipment that is capable of simultaneous reception and re-transmission on different frequencies.
- z) "Responder" means a Category 1 or 2 Responder as listed in Schedule 1 of the Civil Contingencies Act 2004,
- z) "Relevant Radio Equipment" means all the Radio Equipment that is authorised by this Licence to transmit at powers higher than 10 Watts EIRP or 6.1 Watts ERP.
- aa) "Shared site" means a site that is shared by the Licensee and at least one other licensee for the purposes of establishing, installing, modifying or using wireless telegraphy stations or wireless telegraphy apparatus.
- bb) "Shared Site Exemption" means any of the following three situations apply on a shared site in relation to the Licensee's or another licensee's wireless telegraphy station(s) or wireless telegraphy apparatus that is authorised to transmit at powers higher than 10 Watts EIRP or 6.1 Watts ERP:
 - The first situation is that all of the licensee's wireless telegraphy station(s) or wireless telegraphy apparatus on a shared site do not transmit at a combined total radiated power in any particular direction⁶⁶ that is higher than 100 Watts EIRP or 61 Watts ERP.⁶⁷

-

⁶⁶ For the purpose of this situation, the combined total radiated power is a simple sum of the radiated powers (in EIRP or ERP) of all of the licensee's wireless telegraphy station(s) or wireless telegraphy apparatus on the shared site that transmits signals covering the same or overlapping areas.

⁶⁷ 100 Watts EIRP is equivalent to 61 Watts ERP.

- The second situation is that the total electromagnetic field exposure levels produced by the licensee's wireless telegraphy station(s) or wireless telegraphy apparatus in any area where a member of the general public is or can be expected to be present when transmissions are taking place is no more than 5% of the basic restrictions or 5% of the reference levels in the relevant tables for general public exposure identified in the ICNIRP Guidelines. ⁶⁸
- The third situation is where the licensee's wireless telegraphy station or wireless telegraphy apparatus has an antenna gain that is equal to or higher than 29 dBi and has a fixed beam.
- cc) "Site" means a physical structure, building, vehicle or moving platform.
- dd) "Ship" has the same meaning as given in section 313 of the Merchant Shipping Act 1995.
- ee) "the Act" means the Wireless Telegraphy Act 2006.
- ff) "Unattended Operation" means the use of Radio Equipment by a person in a different location from that of the Radio Equipment.
- gg) "Undue Interference" has the meaning given by Section 115 of the Act.
- hh) "User Service" means the British Red Cross, St John Ambulance, the St Andrew's Ambulance Association, the Royal Voluntary Service, the Salvation Army, any Government Department, any 'Category 1' responder, and any Category 2 responder as defined in the Civil Contingencies Act 2004;
- ii) "Wireless telegraphy apparatus" has the meaning given to it in section 117 of the Act.
- jj) "Wireless telegraphy station" has the meaning given to it in section 117 of the Act.
- 2. Any schedule to the Licence shall form part of the Licence, together with any subsequent schedule which Ofcom may issue as a variation to the Licence.
- 3. The Interpretation Act 1978 shall apply to the Licence as it applies to an Act of Parliament.

82

⁶⁸ The relevant tables for general public exposure are identified in Ofcom's "Guidance on EMF Compliance and Enforcement".

Schedule 1

The Licensee shall only operate the Radio Equipment using the frequency bands and power levels set out in in the in the corresponding Table for their level of Licence.

Licence level	Table
Foundation	А
Intermediate	В
Full Licence, Full (Temporary Reciprocal) Licence or Full (Club) Licence	С

Notes to Schedule 1

- a) dBW is the power level in dB relative to one Watt.
- b) "EIRP" means equivalent isotropically radiated power which is the product of the power supplied to an antenna and the absolute or isotropic antenna gain in a given direction relative to an isotropic antenna.
- c) "ERP" means effective radiated power which is the product of the power supplied to an antenna and its gain in a given direction relative to a half-wave dipole.
- d) **ISM** is an abbreviation for industrial, scientific and medical applications.
- e) Peak Envelope Power (PEP)" is the average power supplied to the antenna by a transmitter during one radio frequency cycle at the crest of the modulation envelope taken under normal operating conditions.
- f) Unless airborne power limits are stipulated for the frequency band, the use of Radio Equipment is not permitted airborne.

Table A: Foundation Licence Parameters

Frequency bands	Status of Amateur Service allocation under this licence	Status of Amateur Satellite Service allocation under this licence	Maximum Peak Envelope Power level in Watts (and dB relative to 1 Watt)
135.7 to 137.8 kHz	Secondary. Available on the basis of non-interference to other services.	Not allocated	1W (0 dBW) ERP
1810 to 1830 kHz	Primary. Available on the basis of non-interference to other services outside the UK or Crown Dependencies.	Not allocated	25 20W (13.98 dBW) 10W (10 dBW) 500 mW EIRP airborne
1830 to 1850 kHz	Primary	Not allocated	25 20W (13.98 dBW) 10W (10 dBW) 500 mW EIRP airborne
1850 to 2000 kHz	Secondary. Available on the basis of non-interference to other services.	Not allocated	25 20W (13.98 dBW) 10W (10 dBW)
3500 to 3800 kHz	Primary. Shared with other Services.	Not allocated	25 20W (13.98 dBW) 10W (10 dBW) 500 mW EIRP airborne
7000 to 7100 kHz	Primary	Primary	25 29W (13.98 dBW) 10W (10 dBW) 500 mW EIRP airborne
7100 to 7200 kHz	Primary	Not allocated	25 20W (13.98 dBW) 10W (10 dBW) 500 mW EIRP airborne
10000 to 10150 kHz	Secondary	Not allocated	25 20 W (13.98 dBW) 10W (10 dBW)
14000 to 14250 kHz	Primary	Primary	25 20W (13.98 dBW) 10W (10 dBW) 500 mW EIRP airborne
14250 to 14350 kHz	Primary	Not allocated	25 20W (13.98 dBW) 10W (10 dBW) 500 mW EIRP airborne
18068 to 18168 kHz	Primary	Primary	25 29W (13.98 dBW) 10W (10 dBW) 500 mW EIRP airborne
21000 to 21450 kHz	Primary	Primary	25 20 W (13. <mark>98</mark> dBW) 10W (10 dBW)

Frequency bands	Status of Amateur Service allocation under this licence	Status of Amateur Satellite Service allocation under this licence	Maximum Peak Envelope Power level in Watts (and dB relative to 1 Watt)
			500 mW EIRP airborne
24890 to 24990 kHz	Primary	Primary	25 20W (13.98 dBW) 10W (10 dBW) 500 mW EIRP airborne
28.0 to 29.7 MHz	Primary	Primary	25 20W (13.98 dBW) 10W (10 dBW) 500 mW EIRP airborne
50 to 51 MHz	Primary. Available on the basis of non-interference to other services outside the UK or Crown Dependencies.	Not allocated	25 20W (13.98 dBW) 10W (10 dBW) 500 mW EIRP airborne
51 to 52 MHz	Secondary. Available on the basis of non-interference to other services.	Not allocated	25 20 W (13.98 dBW) 10W (10 dBW)
70.0 to 70.5 MHz	Secondary. Available on the basis of non-interference to other services.	Not allocated	25 20 W (13.98 dBW) 10W (10 dBW)
144 to 146 MHz	Primary	Primary	25 20W (13.98 dBW) 10W (10 dBW) 500 mW EIRP airborne
430 to 431 MHz	Secondary	Not allocated	25 20W (13.98 dBW)
431 to 432 MHz	Secondary. Not available for use within 100km radius of Charing Cross, London (51°30'30"N, 00°07'24"W).	Not allocated	25 20 W (13.98 dBW) 10W (10 dBW)
432 to 435 MHz	Secondary	Not allocated	25 20 W (13. <i>98</i> dBW) 10W (10 dBW)
435 to 438 MHz	Secondary	Secondary	<mark>25 20W</mark> (13. <i>98</i> dBW) 10W (10 dBW)
438 to 440 MHz	Secondary	Not allocated	25 20W (13.98 dBW) 10W (10 dBW)
2400 to 2450 MHz	Secondary. Users must accept interference from ISM users.	Secondary. Users must accept interference from ISM users.	2 <mark>1W (39 dBW)</mark>
<mark>5650</mark> to <mark>5670</mark> MHz	Secondary	Secondary. Earth to space only	2 <mark>1</mark> W (30 dBW)
5670 to 5680 MHz	Secondary	Not allocated	2 <mark>1</mark> W (30 dBW)
<mark>5755</mark> to <mark>5765</mark> MHz	Secondary. Users must accept interference from ISM users.	Not allocated	2 <mark>4W (3</mark> 9 dBW)
<mark>5820</mark> to <mark>5830</mark> MHz	Secondary. Users must	Not allocated	<mark>21</mark> W (<mark>3</mark> 0 dBW)

Frequency bands	Status of Amateur Service allocation under this licence	Status of Amateur Satellite Service allocation under this licence	Maximum Peak Envelope Power level in Watts (and dB relative to 1 Watt)
	accept interference from ISM users.		
10.000 to 10.125 GHz	Secondary	Not allocated	1W (0 dBW)
10.225 to 10.450 GHz	Secondary	Not allocated	1W (0 dBW)
10.450 to 10.475 GHz	Secondary	Secondary	1W (0 dBW)
10.475 to 10.500 GHz	Not allocated	Secondary	1W (0 dBW)

Table B: Intermediate Licence Parameters

Status of Amateur Service allocation under this licence	Status of Amateur Satellite Service allocation under this licence	Maximum Peak Envelope Power level in Watts (and dB relative to 1 Watt)
Secondary. Available on the basis of non-interference to other services.	Not allocated	1W (0 dBW) ERP
Primary. Available on the basis of non-interference to other services outside the UK or Crown Dependencies.	Not allocated	100W (20 dBW)-50W (17 dBW) 500 mW EIRP airborne
Primary	Not allocated	100W (20 dBW)-50W (17 dBW) 500 mW EIRP airborne
Secondary. Available on the basis of non-interference to other services.	Not allocated	32W (15 dBW)
Primary. Shared with other Services.	Not allocated	100W (20 dBW) 50W (17 dBW) 500 mW EIRP airborne
Primary	Primary	100W (20 dBW)-50W (17 dBW) 500 mW EIRP airborne
Primary	Not allocated	100W (20 dBW)-50W (17 dBW) 500 mW EIRP airborne
Secondary	Not allocated	100W (20 dBW)- 50W (17 dBW)
Primary	Primary	100W (20 dBW) 50W (17 dBW) 500 mW EIRP airborne
Primary	Not allocated	100W (20 dBW)-50W (17 dBW) 500 mW EIRP airborne
Primary	Primary	100W (20 dBW)-50W (17 dBW) 500 mW EIRP airborne
Primary	Primary	100W (20 dBW)-50W (17 dBW) 500 mW EIRP airborne
Primary	Primary	100W (20 dBW)-50W (17 dBW) 500 mW EIRP airborne
Primary	Primary	100W (20 dBW)-50W (17 dBW) 500 mW EIRP airborne
	Secondary. Available on the basis of non-interference to other services. Primary. Available on the basis of non-interference to other services outside the UK or Crown Dependencies. Primary Secondary. Available on the basis of non-interference to other services. Primary. Shared with other Services. Primary Primary Primary Primary Primary Primary Primary Primary	allocation under this licence Secondary. Available on the basis of non-interference to other services. Primary. Available on the basis of non-interference to other services outside the UK or Crown Dependencies. Primary Secondary. Available on the basis of non-interference to other services. Primary Not allocated Secondary. Available on the basis of non-interference to other services. Primary. Shared with other Services. Primary Primary Not allocated Secondary Not allocated Primary Primary Not allocated Primary Primary

Frequency Bands	Status of Amateur Service allocation under this licence	Status of Amateur Satellite Service allocation under this licence	Maximum Peak Envelope Power level in Watts (and dB relative to 1 Watt)
50 to 51 MHz	Primary. Available on the basis of non-interference to other services outside the UK or Crown Dependencies.	Not allocated	100W (20 dBW)- 50W (17 dBW) 500 mW EIRP airborne
51 to 52 MHz	Secondary. Available on the basis of non-interference to other services.	Not allocated	100W (20 dBW)- 50W (17 dBW)
70.0 to 70.5 MHz	Secondary. Available on the basis of non-interference to other services.	Not allocated	100W (20 dBW)- 50W (17 dBW)
144 to 146 MHz	Primary	Primary	100W (20 dBW)- 50W (17 dBW) 500 mW EIRP airborne
430 to 431 MHz	Secondary	Not allocated	40W (16 dBW) ERP
431 to 432 MHz	Secondary. Not available for use within 100km radius of Charing Cross, London (51°30'30"N, 00°07'24"W).	Not allocated	40W (16 dBW) ERP
432 to 435 MHz	Secondary	Not allocated	100W (20 dBW) -50W (17 dBW)
435 to 438 MHz	Secondary	Secondary	100W (20 dBW) -50W (17 dBW)
438 to 440 MHz	Secondary	Not allocated	100W (20 dBW) -50W (17 dBW)
1240 to 1260 MHz	Secondary	Not allocated	100W (20 dBW) -50W (17 dBW)
1260 to 1270 MHz	Secondary	Secondary. Earth to space only	100W (20 dBW) -50W (17 dBW)
1270 to 1325 MHz	Secondary	Not allocated	100W (20 dBW) 50W (17 dBW)
2310 to 2350 MHz	Secondary. Available on the basis of non-interference to other services.	Not allocated	100W (20 dBW)- 50W (17 dBW)
2390 to 2400 MHz	Secondary. Available on the basis of non-interference to other services.	Not allocated	100W (20 dBW)- 50W (17 dBW)
2400 to 2450 MHz	Secondary. Users must accept interference from ISM users.	Secondary. Users must accept interference from ISM users.	100W (20 dBW)- 50W (17 dBW)
3400 to 3410 MHz	Secondary. Available on the basis of non-interference to other services.	Not allocated	100W (20 dBW)- 50W (17 dBW)
5650 to 5670 MHz	Secondary	Secondary. Earth to space only	100W (20 dBW) -50W (17 dBW)
5670 to 5680 MHz	Secondary	Not allocated	100W (20 dBW) 50W

Frequency Bands	Status of Amateur Service allocation under this licence	Status of Amateur Satellite Service allocation under this licence	Maximum Peak Envelope Power level in Watts (and dB relative to 1 Watt)
5755 to 5765 MHz	Secondary. Users must accept interference from ISM users.	Not allocated	100W (20 dBW)-50W (17 dBW)
5820 to 5830 MHz	Secondary. Users must accept interference from ISM users.	Not allocated	100W (20 dBW)- 50W (17 dBW)
5830 to 5850 MHz	Secondary. Users must accept interference from ISM users.	Secondary. Users must accept interference from ISM users. Space to Earth only.	100W (20 dBW) 50W (17 dBW)
10.000 to 10.125 GHz	Secondary	Not allocated	100W (20 dBW)- 50W (17 dBW)
10.225 to 10.450 GHz	Secondary	Not allocated	100W (20 dBW) 50W (17 dBW)
10.450 to 10.475 GHz	Secondary	Secondary	100W (20 dBW) 50W (17 dBW)
10.475 to 10.500 GHz	Not allocated	Secondary	100W (20 dBW) 50W (17 dBW)
24.00 to 24.05 GHz	Primary. Users must accept interference from ISM users.	Primary. Users must accept interference from ISM users.	100W (20 dBW)- 50W (17 dBW) 500 mW EIRP airborne
24.05 to 24.15 GHz	Secondary. May only be used with the written consent of Ofcom. Users must accept interference from ISM users.	Not allocated	100W (20 dBW) -50W (17 dBW)
24.15 to 24.25 GHz	Secondary	Not allocated	100W (20 dBW)-50W (17 dBW)
47.0 to 47.2 GHz	Primary	Primary	100W (20 dBW)-50W (17 dBW) 500 mW EIRP airborne
75.500 to 75.875 GHz	Secondary	Secondary	100W (20 dBW)- 50W (17 dBW)
75.875 to 76.000 GHz	Primary	Primary	100W (20 dBW)-50W (17 dBW) 500 mW EIRP airborne
76.0 to 77.5 GHz	Secondary	Secondary	100W (20 dBW) 50W (17 dBW)
77.5 to 78.0 GHz	Primary	Primary	100W (20 dBW)-50W (17 dBW) 500 mW EIRP airborne
78 to 79 GHz	Secondary	Secondary	100W (20 dBW)-50W (17 dBW)
79 to 81 GHz	Secondary	Secondary	100W (20 dBW) 50W

Frequency Bands	Status of Amateur Service allocation under this licence	Status of Amateur Satellite Service allocation under this licence	Maximum Peak Envelope Power level in Watts (and dB relative to 1 Watt)
			(17 dBW)
122.25 to 123.00 GHz	Secondary	Not allocated	100W (20 dBW) -50W (17 dBW)
134 to 136 GHz	Primary	Primary	100W (20 dBW) 50W (17 dBW) 500 mW EIRP airborne
136 to 141 GHz	Secondary	Secondary	100W (20 dBW)- 50W (17 dBW)
241 to 248 GHz	Secondary	Secondary	100W (20 dBW) 50W (17 dBW)
248 to 250 GHz	Primary	Primary	100W (20 dBW) 50W (17 dBW)
			500 mW EIRP airborne

Table C: Full Licence Parameters

Frequency Bands	Status of Amateur Service allocation under this licence	Status of Amateur Satellite Service allocation under this licence	Maximum Peak Envelope Power level in Watts (and dB relative to 1 Watt)
135.7 to 137.8 kHz	Secondary. Available on the basis of non- interference to other services.	Not allocated	1W (0 dBW) ERP
472 to 479 kHz	Secondary	Not allocated	5W (7 dBW) EIRP
1810 to 1830 kHz	Primary. Available on the basis of non-interference to other services outside the UK or Crown Dependencies.	Not allocated	1000W (30 dBW) 400W (26 dBW) 500 mW EIRP airborne
1830 to 1850 kHz	Primary	Not allocated	1000W (30 dBW) 400W (26 dBW) 500 mW EIRP airborne
185 <mark>0</mark> to 2000 kHz	Secondary. Available on the basis of non-interference to other services.	Not allocated	32W (15 dBW)
3500 to 3800 kHz	Primary. Shared with other Services.	Not allocated	1000W (30 dBW) 400W (26 dBW) 500 mW EIRP airborne
5258.5 to 5264 kHz 5276 to 5284 kHz 5288.5 to 5292 kHz 5298 to 5307 kHz 5313 to 5323 kHz 5333 to 5338 kHz 5354 to 5358 kHz 5362 to 5374.5 kHz 5378 to 5382 kHz 5395 to 5401.5 kHz 5403.5 to 5406.5 KHz	Secondary. Subject to restrictions set out in note (g). Available on the basis of non-interference to other services inside the UK or Crown Dependencies.	Not allocated	100 W (20dBW)
7000 to 7100 kHz	Primary	Primary	1000W (30 dBW) 400W (26 dBW) 500 mW EIRP airborne
7100 to 7200 kHz	Primary	Not allocated	1000W (30 dBW) 400W (26 dBW) 500 mW EIRP airborne
10.10 to 10.15 MHz	Secondary	Not allocated	400W (26 dBW)

Frequency Bands	Status of Amateur Service allocation under this licence	Status of Amateur Satellite Service allocation under this licence	Maximum Peak Envelope Power level in Watts (and dB relative to 1 Watt)
14.00 to 14.25 MHz	Primary	Primary	1000W (30 dBW) 400W (26 dBW) 500 mW EIRP airborne
14.25 to 14.35 MHz	Primary	Not allocated	1000W (30 dBW) 400W (26 dBW) 500 mW EIRP airborne
18.068 to 18.168 MHz	Primary	Primary	1000W (30 dBW) 400W (26 dBW) 500 mW EIRP airborne
21.00 to 21.45 MHz	Primary	Primary	1000W (30 dBW) 400W (26 dBW) 500 mW EIRP airborne
24.89 to 24.99 MHz	Primary	Primary	1000W (30 dBW) 400W (26 dBW) 500 mW EIRP airborne
28.0 to 29.7 MHz	Primary	Primary	1000W (30 dBW) 400W (26 dBW) 500 mW EIRP airborne
50 to 51 MHz	Primary. Available on the basis of non-interference to other services outside the UK or Crown Dependencies.	Not allocated	1000W (30 dBW) 400W (26 dBW) 500 mW EIRP airborne
51 to 52 MHz	Secondary. Available on the basis of non-interference to other services.	Not allocated	100W (20 dBW)
70.0 to 70.5 MHz	Secondary. Available on the basis of non-interference to other services.	Not allocated	160W (22 dBW)
144 to 146 MHz	Primary	Primary	1000W (30 dBW) 400W (26 dBW) 500 mW EIRP airborne
430 to 431 MHz	Secondary	Not allocated	40W (16 dBW) ERP
431 to 432 MHz	Secondary. Not available for use; within 100km radius of Charing Cross, London (51°30'30"N,00°07'4"W).	Not allocated	40W (16 dBW) ERP
432 to 435 MHz	Secondary	Not allocated	400W (26 dBW)

Frequency Bands	Status of Amateur Service allocation under this licence	Status of Amateur Satellite Service allocation under this licence	Maximum Peak Envelope Power level in Watts (and dB relative to 1 Watt)
435 to 438 MHz	Secondary	Secondary	400W (26 dBW)
438 to 440 MHz	Secondary	Not allocated	400W (26 dBW)
1240 to 1260 MHz	Secondary	Not allocated	400W (26 dBW)
1260 to 1270 MHz	Secondary	Secondary. Earth to space only	400W (26 dBW)
1270 to 1325 MHz	Secondary	Not allocated	400W (26 dBW)
2310 to 2350 MHz	Secondary. Available on the basis of non-interference to other services.	Not allocated	400W (26 dBW)
2390 to 2400 MHz	Secondary. Available on the basis of non-interference to other services.	Not allocated	400W (26 dBW)
2400 to 2450 MHz	Secondary. Users must accept interference from ISM users.	Secondary. Users must accept interference from ISM users.	400W (26 dBW)
3400 to 3410 MHz	Secondary. Available on the basis of non-interference to other services.	Not allocated	400W (26 dBW)
5650 to 5670 MHz	Secondary	Secondary. Earth to space only	400W (26 dBW)
5670 to 5680 MHz	Secondary	Not allocated	400W (26 dBW)
5755 to 5765 MHz	Secondary. Users must accept interference from ISM users.	Not allocated	400W (26 dBW)
5820 to 5830 MHz	Secondary. Users must accept interference from ISM users.	Not allocated	400W (26 dBW)
5830 to 5850 MHz	Secondary. Users must accept interference from ISM users.	Secondary. Users must accept interference from ISM users. Space to Earth only.	400W (26 dBW)
10.000 to 10.125 GHz	Secondary	Not allocated	400W (26 dBW)
10.225 to 10.450 GHz	Secondary	Not allocated	400W (26 dBW)
10.450 to 10.475 GHz	Secondary	Secondary	400W (26 dBW)
10.475 to 10.500 GHz	Not allocated	Secondary	400W (26 dBW)
24.00 to 24.05 GHz	Primary. Users must accept interference from ISM users.	Primary. Users must accept interference from ISM users.	1000W (30 dBW) 400W (26 dBW) 500 mW EIRP airborne
24.05 to 24.15 GHz	Secondary. May only be used with the written consent of Ofcom. Users must accept interference from ISM users.	Not allocated	400W (26 dBW)
24.15 to 24.25 GHz	Secondary	Not allocated	400W (26 dBW)

Frequency Bands 47.0 to 47.2 GHz	Status of Amateur Service allocation under this licence Primary	Status of Amateur Satellite Service allocation under this licence Primary	Maximum Peak Envelope Power level in Watts (and dB relative to 1 Watt) 1000W (30 dBW) 400W (26 dBW) 500 mW EIRP airborne
75.500 to 75.875 GHz	Secondary	Secondary	400W (26 dBW)
75.875 to 76.000 GHz	Primary	Primary	1000W (30 dBW) 400W (26 dBW) 500 mW EIRP airborne
76.0 to 77.5 GHz	Secondary	Secondary	400W (26 dBW)
77.5 to 78.0 GHz	Primary	Primary	1000W (30 dBW) 400W (26 dBW) 500 mW EIRP airborne
78 to 79 GHz	Secondary	Secondary	400W (26 dBW)
79 to 81 GHz	Secondary	Secondary	400W (26 dBW)
122.25 to 123.00 GHz	Secondary	Not allocated	400W (26 dBW)
134 to 136 GHz	Primary	Primary	1000W (30 dBW) 400W (26 dBW) 500 mW EIRP airborne
136 to 141 GHz	Secondary	Secondary	400W (26 dBW)
241 to 248 GHz	Secondary	Secondary	400W (26 dBW)
248 to 250 GHz	Primary	Primary	1000W (30 dBW) 400W (26 dBW) 500 mW EIRP airborne

5 MHz band note

- g) Where Radio Equipment is being used in the channels allocated between 5.2585 MHz and 5.4065 MHz (the "5 MHz band"), the following specific terms and conditions will also apply:
- i) When operating double sideband, the maximum bandwidth shall not exceed 6 kHz;
- ii) Notwithstanding the maximum peak envelope power expressed in the table, above, the maximum radiated power must not exceed 200 Watts EIRP;
- iii) The antenna height shall not exceed 20 metres above ground level;
- iv) The Licensee must not cause interference to the use made of the 5 MHz band by the Ministry of Defence ("MoD") and must close down any apparatus that operates in the 5 MHz band if he or she becomes aware that such use is causing undue interference to the MoD's use of the band;

- v) Communication may be established with military or military cadet organisations by transmitting and receiving only in the 5 MHz band;
- vi) Particular care must be taken to ensure radiation does not take place outside the specified frequencies within the 5 MHz band;
- vii) Where the Licensee intends to operate within a "net" (a network), the Licensee shall observe the following requirements in relation to the transmission of his or her Callsign:
- (1) The Licensee shall transmit the station Callsign when he first joins the net and on leaving it;
- subject to sub-condition (c) below, whilst participating in the net, the Licensee shall not be required to transmit the station Callsign when making contact with other participants;
- (3) where the Licensee's transmissions have been other than in speech mode for at least fifteen minutes, the Licensee shall transmit his call sign when next he transmits speech.
- viii) The Licensee shall operate the Station only at the Main Station Address or at a Temporary Location within the United Kingdom or Crown Dependencies.
- ix) At a Temporary Location within the United Kingdom or Crown Dependencies, the Licensee shall give the location of the Station every 30 minutes to an accuracy of at least 5km;
- x) The Licensee shall only operate the Radio Equipment to the extent that the Licensee can be contacted on a telephone which is located in close proximity to where the Radio Equipment is being operated.

Schedule 2

Additional restrictions which apply to the Unattended Operation of Beacons

<u>Frequencies</u>	Full Licence, Full (Temporary Reciprocal) Licence, Full (Club) Licence	Intermediate Licence	Foundation Licence
1.960 MHz	(1)	(1)	Not allocated
3.510 to 3.543 MHz	<mark>(1)</mark>	Not allocated	Not allocated
3.553 to3.600 MHz	(1)	Not allocated	Not allocated
28.0to 28.1 MHz	Not within 50 km of NGR SK-985640 (1).	Not allocated	Not allocated
28.1to 28.5 MHz	Not within 50 km of NGR SK 985640 (1).	Not within 50 km of NGR SK 985640 (1).	Not allocated
28.5to 29.7 MHz	Not within 50 km of NGR SK-985640 (1).	Not allocated	Not allocated
70.0to 70.5 MHz		Not-allocated	Not allocated
144to 146-MHz	Not within 50 km of NGR TA 012869 (1) (2).	Not-allocated	Not allocated
1298to 1299 MHz	Not in N. Ireland and not within 50 km of NGR SS 206127 and NGR SE 202577.	Not in N. Ireland and not within 50 km of NGR SS 206127 and NGR SE 202577.	Not allocated
2310.0to 2310.4125 MHz	Not within 50 km of NGR SS-206127 and NGR SE 202577.	Not allocated	Not allocated
2310.4125to 2350.0 MHz		Not allocated	Not allocated
2390to 2392 MHz		Not-allocated	Not allocated
2392to 2450 MHz	Not within 50 km of NGR SS-206127 and NGR SE 202577.	Not allocated	Not allocated
3400to 3410 MHz		Not-allocated	Not allocated
5650to 5670 MHz		Not-allocated	Not allocated
5670to 5680 MHz	Not within 50 km of NGR SS-206127 and NGR SE 202577.	Not allocated	Not allocated
5755to-5765-MHz		Not allocated	Not allocated
5820to 5850 MHz		Not-allocated	Not allocated
10.0to 10.125 GHz	Not within 50 km of NGR	Not within 50 km of NGR	Not allocated

Frequencies	Full Licence, Full (Temporary Reciprocal) Licence, Full (Club) Licence	Intermediate Licence	Foundation Licence
	SO 916223, SS 206127, NGRSK	SS 206127, NGR SK 985640 or	
10.4to 10.475 GHz	985640 and NGR SE 202577.	NGR SE 202577.	Not allocated
24.0to 24.050 GHz	Not within 50 km of NGR SK 985640 and NGR SE 202577.	Not allocated	Not allocated
47.0to 47.2 GHz	Not within 50 km of NGR SK 985640 and NGR SE 202577.	Not allocated	Not allocated

Notes to additional restrictions which apply to the unattended operation of beacons

- (1) May only be used for the purpose of direction finding competitions. The Beacon must transmit the Callsign of the Licensee and it must be possible to switch the Beacon off within two hours of a demand to close down by a person authorised by Ofcom.
- (2) It is permissible to transmit positional information using automatic position reporting software on a spot frequency of 144.8 MHz at any one temporary location not within 50 km of NGR TA 012869. The maximum permitted period of unattended operation is 30 minutes.

Notes to schedule 2

- 1) The Unattended Operation of Beacons is only permitted within the frequency bands:
 - I. Which are listed in the first column of Schedule 2; or
 - Which are above 75.5 GHz and are listed in the first column of Schedule 1 providing that such operation is not within 50 km of NGR SK 985640 and NGR SE202577.
- 2)—Beacons may operate with a maximum power level of 25 W ERP PEP.

A3. Notice of coordination

Amateur Radio: Notice of coordination procedures

Overview

This Notice applies to all Amateur Radio Licensee, as set out under their respective licences.

This Notice specifies the protection requirements and coordination procedures necessary to ensure the protection of other radio users from Amateur Radio transmissions.

Coordination requirements

General restrictions

Amateur radio use of certain frequency bands is only possible due to other users, including the Ministry of Defence (MoD), sharing frequency allocations that they use. Where Amateur Radio use of a band is made available on this basis it is on the condition that the radio amateur use does not interfere with other services and can claim no protection from interference.

Amateur Radio use of certain frequency bands is also subject to additional restrictions; these are detailed in Table 1 below.

Table 1: Amateur radio general use coordination requirement

Frequency	Comments
431-432 MHz	The use of the following frequencies is not permitted within 100km of London (Charing Cross).

Beacons and repeaters

The deployment and operation of certain radio beacons and repeaters are subject to coordination restrictions. These are set out in Table 2 below.

Table 2: Amateur radio beacon and repeater coordination requirement

Frequency	Comments
28.0 – 29.7 MHz	Use of an Unattended Beacon is not permitted within 50 km of NGR SK 985640
144 - 146 MHz	Use of an Unattended Beacon is not permitted within 50 km of NGR TA 012869

Frequency	Comments
430 - 440MHz	Deployment of a repeater in this band is subject to coordination with the Ministry of Defence. Licensees must have clearance from Ofcom before operating a repeater.
1240 – 1325 MHz	Deployment of a repeater in this band is subject to coordination with the Ministry of Defence and Civil Aviation Authority. Licensees must have clearance from Ofcom before operating a repeater.
1298 – 1299 MHz	Use of an Unattended Beacon is not permitted in Northern Ireland and not within 50 km of NGR SS 206127 and NGR SE 202577.
2310.0 MHz - 2310.4125 MHz	Use of an Unattended Beacon is not permitted within 50 km of NGR SS 206127 and NGR SE 202577.
2392 MHz – 2450 MHz	Use of an Unattended Beacon is not permitted within 50 km of NGR SS 206127 and NGR SE 202577.
5670 MHz – 5680 MHz	Use of an Unattended Beacon is not permitted within 50 km of NGR SS 206127 and NGR SE 202577.
10.0 – 10.125 GHz	Use of an Unattended Beacon is not permitted within 50 km of NGR SO 916223, SS 206127, NGR SK 985640 and NGR SE 202577.
24.0 – 24.050 GHz	Use of an Unattended Beacon is not permitted within 50 km of NGR SK 985640 and NGR SE 202577.
47.0 – 47.2 GHz	Use of an Unattended Beacon is not permitted within 50 km of NGR SK 985640 and NGR SE 202577.
Frequencies above 75.5 GHz that are listed in Schedule-1	Use of an Unattended Beacon is not permitted within 50 km of NGR SK 985640 and NGR SE 202577.

Licensees wishing to deploy a repeater in 430-440 MHz or 1240-1325 MHz will need to obtain a clearance approval from Ofcom as they will need to be coordinated with the Civil Aviation Authority (CAA) and Ministry of Defence (MoD) before any transmissions may begin. Under the new process, clearance requests for the deployment of a repeater in these bands must still be sent to Ofcom.

Clearance requests should only be sent once a provisional call sign has been obtained from the RSGB and applicant has conducted the necessary interference assessment and has provided evidence of this as part of the clearance request. If the clearance application is successful Ofcom will provide the necessary clearance authorisation.

Clearance requests must be sent to spectrum.licensing@ofcom.org.uk.

A4. Special Event Station NoV

A4.1 Below is an example of the Special Event Call Sign NoV. Much of the existing text has been removed as it repeated provisions already set out in the main licence conditions. Text that is highlighted in yellow are new provisions we are introducing.

WIRELESS TELEGRAPHY ACT 2006 NOTICE OF VARIATION OF AN AMATEUR RADIO FULL OR CLUB LICENCE TO AUTHORISE A SPECIAL EVENT CALL SIGN

Licensee name and address	
Date of issue of this NoV	
Licensee's call sign	
Licence №	("the Licence")

Variation

- 1. Ofcom, in exercise of the power conferred by Schedule 1, paragraph 6 of the Wireless Telegraphy Act 2006 ("the Act"), hereby varies the Licence in accordance with Schedule 1, paragraph 7 of the Act, as follows.
- The Station may be identified by the call sign [TEMPORARY CALL SIGN] ("the Special Event Call sign").

Terms and conditions

- 3. The identification of the Station by the Special Event Call Sign must comply with applicable terms and conditions of the Licence, as varied by this Notice of Variation.
- 4. Terms and expressions defined in the Licence shall have the same meaning herein, unless the context requires otherwise.

5 .	The Special Event Call Sign may be used to identify the station, when it is operating at the
	following location(s):

- 6. The Special Event Call Sign may be used only between [START DATE] and [END DATE] (both dates inclusive).
- 7. This Notice of Variation must be kept with the Licence that it varies.
- 8. In addition to any grounds for revocation given in the licence, Ofcom may vary the Licence to alter or cancel the effect of this Notice of Variation, if:
 - a) It can reasonably be held that the Special Event call sign is likely to cause offence; or
 - b) Ofcom is satisfied that the Licensee does not propose to use the Special Event Call sign.

A5. Responses

- A5.1 All non-confidential responses to the Updating the amateur radio licensing framework consultation are published on the <u>Ofcom website</u>. Due to the high number of responses, these have mostly been published in an Excel workbook.
- A5.2 Where a respondent has not clearly signalled the confidentiality of their response, we have treated these as fully confidential.