

# Updating the amateur radio licensing framework

An approach for today and tomorrow's radio amateurs

**CONSULTATION:** 

Publication date: 23 June 2023 Closing date for responses: 4 September 2023

## Contents

### **Section**

1. Overview	3
2. Background	8
3. Review of the licensing framework	15
4. Proposed changes to call signs	22
5. Technical parameters review	36
6. Licence terms and conditions review	47
7. Summary of proposals and next steps	56

### Annex

A1. Legal framework	62
A2. Proposed Amateur Licence and Conditions Booklet	65
A3. Proposed Special Event Station NoV	94
A4. Responding to this consultation	95
A5. Ofcom's consultation principles	98
A6. Consultation coversheet	99
A7. Consultation questions	100

# 1. Overview

This document sets out proposals to make a number of changes to the amateur radio licensing framework. Having reviewed the framework we think we can provide greater operating freedom for people using amateur radio while making the process of getting and using a licence simpler, clearer and more consistent and responsive. We are not proposing any changes to the frequency bands that amateurs can access. Our proposals are part of a wider programme of work to modernise, simplify and improve efficiency in our approach to spectrum licensing.

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 noncommercial 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 101,000 amateur radio licences in the UK currently.

#### What we are proposing - in brief

We are proposing changes to our amateur radio licences and guidelines to ensure they meet the needs of today and tomorrow's radio amateurs and streamline the licensing processes. Our proposed changes would:

#### 1. Update the overall licensing framework:

- Maintain the existing 3-tier licensing framework while streamlining Notices of Variation (NoV);
- Maintain lifetime licences while updating our mechanisms for revalidation;
- Allow anyone to operate amateur radio equipment under a licensee's supervision;
- Only permit licensees to hold a single individual licence, requiring surrender of lower licences as they progress.

#### 2. Streamline and modernise call sign assignment:

 Update our call sign allocation policy in a number of areas including (i) changes to the rules on the reissuing of call signs; (ii) changes to the number of call signs that can be held; (iii) enabling licensees to change their call sign; (iv) expanding the use of suffixes; (v) introducing a new M8 and M9 Intermediate call sign format; (vi) making Regional Secondary Locators (RSLs) optional and simplifying the process for using a special RSL; and (vii) simplifying rules around Special Event Stations.

# **3.** Adjust technical parameters to reflect the evolving needs of the hobby and provide radio amateurs with greater operating freedom:

- Increase the maximum permitted transmit power to allow (i) 20 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;
- Allow Foundation and Intermediate licensees to use the internet for remote control operation;

- Permit the deployment of repeaters, beacons and gateways without requiring a NoV in most cases;
- Allow Foundation licensees to build their own equipment and access the 2.4 GHz and 5 GHz bands; and
- Enable low power airborne use in some frequency bands.

# 4. Provide clearer updated rules (terms and conditions which are easy for everyone to understand):

- Align various terms and conditions with other licences that Ofcom issues;
- Simplify conditions to remove unnecessary complexity and make them clearer; and
- Remove provisions not needed for spectrum management purposes.

We welcome responses to our proposals by **5pm on 4 September 2023**. Following responses, we will publish a statement setting out our changes to the amateur radio licence.

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

### Ofcom is proposing to update the amateur radio licence to enable amateur radio to continue to develop as a hobby, within a simplified regulated framework that supports optimal spectrum use

- 1.1 Ofcom's role is to manage the use of spectrum to ensure it is used efficiently and to manage the radio environment. 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. These obligations are ongoing and must be assessed against market circumstances and the state of technology development at the time.
- 1.2 In this consultation, we propose changes to the current <u>licensing framework</u> which aim 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, in particular aiming to:
  - modernise our policies and rules to allow radio amateurs greater operating freedoms whilst maintaining appropriate regulatory control over spectrum use;
  - make our rules as clear and streamlined as possible, aligning with other spectrum areas that we authorise where appropriate, to improve consistency and responsiveness.
- 1.3 Figure 1 provides a summary of how some of our proposed changes fit under these areas.

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



Modernise our policies and rules to allow greater operating freedoms



Clarify and streamline our rules and processes

Proposed changes to amateur radio licence	+	0			
	Review of licensing framework proposals				
Licensees should only hold a single personal licence		✓			
Allow greater supervised third-party use of radio equipment	<b>~</b>				
Proposed changes to call signs					
Introduce a new M8 and M9 Intermediate call sign format		✓			
Make the use of Regional Secondary Locators (RSL) optional, with simpler rules	<b>~</b>	~			
Permit the optional use of the RSL 'E' for all licence classes when operating in England	✓	✓			
Simplify the process for authorising special RSLs	✓	✓			
Simplify licence terms on the use of call sign suffixes and allow their use on an optional basis	<b>~</b>	~			
Allow old call signs to be reissued online	<ul> <li>Image: A second s</li></ul>	✓			
When our new licensing platform has been implemented we	<ul> <li>Image: A second s</li></ul>	✓			
could 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					
Increase the permitted transmit power for all licence levels	<ul> <li>Image: A second s</li></ul>				
Enable all licensees to use internet-based technologies for remote control operation	<b>v</b>	~			
Allow the deployment of most beacons, gateways and repeaters without the need to apply for an NoV	<b>~</b>	~			
Liberalise the Foundation Licence to allow them to build their own equipment and gain access to the 2.4 GHz and 5 GHz bands	✓				
Allow low power airborne use in some bands	<				
Licence terms and conditions revi	ew				
Update the amateur radio licence to have greater alignment		<b>~</b>			
with standard Ofcom format and licence conditions					
Minor changes to the licence template to simplify and ensure		✓			
consistency with CEPT Recommendation T/R 61-01					
Update the licence terms and conditions to remove unnecessary complexity and make them clearer	<b>~</b>	~			

### **Ofcom's plans for simplification of spectrum licences**

- 1.4 The review of amateur licences is part of a broader effort by Ofcom to simplify, standardise and where possible further automate elements of our licensing work, as referenced in <u>Ofcom's Plan of Work 2023-24</u>.<sup>1</sup> We aim to review our licensing processes and documentation to ensure we have an efficient approach, reducing the burden on our licensees as far as possible and simplifying their engagement with us, including through our work on Licensing platform evolution. In this context, we have reviewed the amateur radio licensing framework to look at the current licensing rules and processes to identify where these can be made clearer and more streamlined, including through more harmonisation with other licence products we make available.
- 1.5 We believe that by making the licence simpler and easier to understand, with a wider range of operations authorised in the core licence, we will increase the speed and smoothness of the licensing process for both radio amateurs and other licensees. For example, our proposed changes to our call sign allocation process will enable all applicants to apply for their licence using the online platform. We anticipate that by making the licence and our policies clearer it will support licensees to feel more confident in how they must apply the rules and minimise the need to contact Ofcom regarding a number of areas which currently often give rise to questions. This will not only make it simpler and quicker for licensees to undertake a wider range of activities with confidence that they are consistent with the terms of their licence but will also improve the service they receive.

### Next steps and implementation

- 1.6 Our proposals aim to modernise our framework to enable amateur radio to continue to develop as a hobby in the UK, while ensuring optimal spectrum use, with clearer and more streamlined processes and guidance for licensees. We welcome feedback on our proposals and wish to hear from all stakeholders involved in amateur radio, as well as any other interested parties. The closing date for any responses is **5pm on 4 September 2023.**
- 1.7 Following responses to this consultation, we plan to publish a policy statement by the end of 2023 that sets out our decisions on the proposed policy and licence changes outlined in this document.
- 1.8 If we decide to proceed with these proposals, we envisage that we would implement them in three phases, as set out in the provisional plan at paragraph 7.18.
- 1.9 The first phase would involve varying the amateur radio licence to incorporate new licence conditions. We anticipate that this process would commence shortly after the publication of our statement, later in the 2023/24 financial year.
- 1.10 During the second phase, we would focus on implementing policies that involve straightforward modifications to our existing licensing system or require specific actions

<sup>&</sup>lt;sup>1</sup> WTA (Wireless Telegraphy Act) licence simplification p45 and Amateur Radio licences review p46.

from Ofcom that can be delivered within our current systems, such as issuing notices of revocation. We would strive to implement these changes in 2024.

- 1.11 The final phase would encompass the introduction of our broader policy proposals which require a transition to the new licensing platform before they can be implemented. This is part of a larger ongoing programme aimed at evolving our current licensing system. We would hope to deliver the implementation of these changes later in the 2024/25 financial year.
- 1.12 These provisional plans may be subject to change. We will provide further updates on implementation timelines in our policy statement later this year, and as needed thereafter.

## 2. Background

### What is amateur radio?

- 2.1 Amateur radio, sometimes known as ham radio, 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.
- 2.2 Amateur radio operators use a wide variety of off-the-shelf and home-made equipment, to experiment and to communicate with other operators. They have access to numerous bands from Low Frequency (LF), between 30 and 300 kHz up to Extremely High Frequency (EHF), between 30 and 300 GHz.
- 2.3 During its history the hobby has played important roles in scientific research, public service and emergency communication. Amateur radio operators have made significant contributions to the development and advancement of radio technology including:
  - Antennas: amateur radio operators have developed various types of antennas that are in use today.
  - Digital communication: the development of various digital modes of communication such as radio teletype (RTTY), Phase Shift Keying 31 Baud (PSK31), and Franke & Taylor 8 (FT8), which were all pioneered by amateur radio operators. Some of these modes have been adopted by commercial and military entities and are used for a wide range of applications including data transmission, digital voice communication and telemetry.
  - Radio navigation: amateur radio operators have contributed to the development of radio navigation systems such as long-range navigation (LORAN) and Global Positioning System (GPS). The development of these systems has greatly improved navigation accuracy and safety for a wide range of applications, including aviation and maritime navigation.
- 2.4 Amateur radio also provides a path for the training and development of new and existing radio engineers through experimentation with a wide range of radio technologies, antenna design, modulation techniques, and signal propagation. Amateur radio operators have access to diverse technologies such as software-defined radios and satellite communications enabling them to develop a broad range of expertise. These skills are relevant to a wide range of wireless technologies used across the economy.
- 2.5 The UK has an active amateur radio community. As shown by <u>our online open data</u>, we have some 101,000 licences on issue, authorising almost 70,000 licensed operators.<sup>2</sup> A breakdown of the types of licences on issue is shown in the Figure 2 below. All radio amateurs operating in the UK are regulated by Ofcom.

<sup>&</sup>lt;sup>2</sup> The higher number of total licences on issue reflects where individuals hold more than one licence, either of different levels or club licences.



#### Figure 2: Number of amateur radio licences on issue

### Ofcom's role in amateur radio

- 2.6 Ofcom is the UK's communications regulator and our duties are set out in statute. Our principal duty is to further the interests of citizens in relation to communications matters.<sup>3</sup> Our overall mission is to make communications work for everyone.
- 2.7 As part of this, we are responsible for managing spectrum to support a wider range of electronic communications services across the UK and must ensure that its use is optimised.<sup>4</sup> One important element in achieving this is to ensure that the different needs and interests of all those who may wish to make use of it whether this is for running businesses, providing public services, undertaking scientific research, or broadcasting the news are taken into account.
- 2.8 We authorise access to spectrum in the UK by setting and enforcing the rules by which people can transmit radio waves. We authorise the use of the radio spectrum either by granting wireless telegraphy licences under the Wireless Telegraphy Act 2006 (the 'WT Act') or by making regulations exempting the use of particular equipment from the requirement to hold such a licence.
- 2.9 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 exempt.
- 2.10 In Annex 1 we set out in more detail the relevant legal framework, which we have taken into account in making the proposals set out in this document. This annex should be treated as part of this document.

<sup>&</sup>lt;sup>3</sup> Section 3(1)(a) of the Communications Act 2003.

<sup>&</sup>lt;sup>4</sup> Section 3(2)(a) of the Communications Act 2003.

#### Current UK amateur radio licensing structure

- 2.11 Amateur radio transmissions can travel around the globe, so it is important to ensure that radio amateurs operate in accordance with rules, designed to minimise the risk of their transmissions disrupting others' use of radio.
- 2.12 These rules are agreed globally at the <u>International Telecommunication Union</u> ('ITU') and are published in the <u>Radio Regulations</u>. Regional rules (which apply across Europe and beyond) are agreed at <u>European Conference of Postal and Telecommunications</u> <u>Administrations</u> ('CEPT'). The UK amateur radio licence bears the CEPT logo to signify that it conforms to the applicable regional agreement.
- 2.13 There are three incremental levels of amateur radio licences in the UK: Foundation (the entry level licence), Intermediate, and Full (the most advanced). These licence conditions outline the rules for the operation of amateur radio equipment and the frequencies that can be used. Each licence level has different privileges and requirements as set out in Table 1.

	Foundation	Intermediate	Full
Wattage	Restricted to 10 Watts	Restricted to 50 Watts	Restricted to 400 Watts
Access	Access to some bands restricted	Access to some bands restricted	Access to all bands
Equipment	May not use homemade equipment	May use homemade equipment	May use homemade equipment
Remote operations	Remote operations restricted to amateur frequencies	Remote operations restricted to amateur frequencies	May use any links for remote operations
Supervision May supervise use of radio equipment by other UK licensees		May supervise use of radio equipment by other UK licensees	May supervise use of radio equipment by other UK licensees and by some other people
Messages from non- licensees	May not permit non- licensees to send messages	May not permit non- licensees to send messages	May permit non- licensees to send messages
NoVs		May apply for some NOVs	May apply for all NoVs (some unavailable to

#### Table 1: Overview of key features of current amateur radio licence levels and their privileges

	Foundation	Intermediate	Full
			Temporary Reciprocal licensees)
Operating in other countries			Passport to operate in other countries (not Club or Temporary Reciprocal)

- 2.14 Given the reach of amateur radio, international agreement requires Ofcom to ensure that radio amateurs are operationally and technically competent.<sup>5</sup> We achieve this by making it a condition that applicants for any amateur radio licence have passed a recognised examination.
- 2.15 Applicants should have passed the necessary examination for each level in radio theory, radio operating techniques, electromagnetic compatibility and in the legal aspects of licence regulations. The examinations and assessments are carried out by the <u>Radio Society</u> of <u>Great Britain</u> (RSGB) through an <u>agreement with Ofcom</u>.<sup>6</sup>
- 2.16 In addition, Ofcom issues Full (Club) licences which are granted to an individual in respect of an amateur radio club. Although this licence is issued to, and in the name of, an individual, the call sign associated with this licence identifies the transmissions of the club. A Full (Club) Licence enables the club to offer facilities to its members.

### Authorisation of international amateur activity

- 2.17 Amateur radio is an international hobby. Under regional arrangements agreed by CEPT, an Ofcom Full Licence is designated as a 'CEPT licence' allowing the holder to operate temporarily in other CEPT signatory administrations. Equally, radio amateurs holding a CEPT licence issued by a foreign administration may operate in the UK.
- 2.18 With a Harmonised Amateur Radio Examination Certificate ('HAREC'), issued by an administration participating in the CEPT arrangements, they may obtain a UK Full Licence. For visitors to the UK who have attained a mutually recognised level of competence in another country (which does not participate in the CEPT arrangements, described below) Ofcom may issue a Full (Temporary Reciprocal) Licence to authorise operation in the UK.
- 2.19 All the different classes of licences are covered by one licence document. This document includes the terms and conditions that apply to all licensees, as well as some terms and conditions that apply only to certain licence classes.

<sup>&</sup>lt;sup>5</sup> Article 25.6 of the <u>ITU Radio Regulations</u>.

<sup>&</sup>lt;sup>6</sup> Ofcom oversees the examination system through the Exam Standards Committee.

### Some additional privileges beyond the standard licence terms are available on a temporary basis through a Notice of Variation to the licence

- 2.20 The amateur radio licence sets out the restrictions within which licensees must operate. However, we may issue some specific additional permissions, which relax one or more of these licence restrictions, for a set period of time. This type of authorisation is called a Notice of Variation ('NoV'). An NoV can authorise an additional technical parameter, such as the use of a frequency band not listed in the licence. Alternatively, an NoV might authorise the use of an alternative call sign.
- 2.21 We issue a number of different NoVs on request. We have a set list of these NoVs that we allow; many of these have been in place for a significant number of years. However, administering NoVs places an administration burden on licensees and Ofcom. Some NoVs entail no more than simply downloading a form from a website, while others require the applicant to provide complex technical information or meet certain qualifying criteria for Ofcom's approval.

### Our objectives for reviewing the amateur radio licence

- 2.22 Amateur radio has long been subject to regulations and licence conditions, designed to ensure the responsible use of the airwaves. Over time, as technology has advanced and the needs of the hobby have evolved, there has been a growing recognition of the need to periodically review and update the authorisation framework.
- 2.23 Despite making some revisions to licence conditions in 2006 and 2014, the amateur radio licence has not undergone a comprehensive review for some time and many of the provisions have been in place since the end of World War 2. As a result, it is our view that the provisions and policies developed around amateur radio do not adequately support the needs of today's and tomorrow's radio amateurs.
- 2.24 It is necessary for us to ensure that the licence conditions remain effective, relevant, and useful for the hobby today and in the future. As set out in our <u>Spectrum Strategy</u>, we want existing spectrum users to grow and innovate whilst also allowing new services to emerge and we said that we would apply greater flexibility and forward thinking management of the spectrum. A review of licence conditions is a critical aspect of this process.

### Our proposals are intended to enable amateur radio to continue to develop as a hobby, within a simplified regulated framework that supports optimal spectrum use

2.25 As set out above, Ofcom's role is to manage the use of spectrum to ensure it is used efficiently and to manage the radio environment, for example to minimise the risk of interference. To achieve 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 networks and services to which they relate, nondiscriminatory, proportionate and transparent. These obligations are ongoing and must be assessed against market circumstances and the state of technology development at the time.

- 2.26 Having considered the existing framework in light of our statutory legal duties and regulatory approach we are seeking to greatly simplify the <u>UK amateur radio licence</u> and its <u>Terms and Conditions</u>, associated documentation and processes. Our aim is to provide a licensing regime for amateur radio which has:
  - modernised policies and rules to allow radio amateurs greater operating freedoms whilst maintaining appropriate regulatory control over spectrum use; and
  - clear and streamlined rules, aligning with other spectrum areas that we authorise where appropriate, to improve consistency and responsiveness.
- 2.27 As part of this work, alongside seeking to update our policies and rules in light of how radio amateurs operate today and may do in the future, we have sought to eliminate unnecessary restrictions or administrative requirements that do not support ensuring the effective use of spectrum. By providing greater operating freedoms through the licence, we would expect this to reduce some of the burdens placed on licensees and simplify their engagement with us. However, certain restrictions will continue to be necessary to prevent interference to neighbouring spectrum users or to comply with international obligations. Where this is the case, we have considered whether these could be further relaxed. If this was not possible, we propose to retain the existing rules. Licensees who do not obey the licence conditions could ultimately have their licence revoked, receive a large fine or face imprisonment.
- 2.28 We believe that by making the licence simpler and easier to understand would remove a significant amount of complexity surrounding amateur radio. The current framework has necessitated the production of a 29-page guidance document, along with various policy documents and FAQs.<sup>7</sup> We believe that our proposals would save licensees time and effort in understanding the regulatory framework in which they operate and allow them to feel more confident in understanding and applying the rules. This may reduce some of the queries and other tasks that licensees currently contact Ofcom for, such as dealing with call sign issues and interpreting the licence. We believe that this will enable us to address other queries more quickly, as well as better focus our resources on our core regulatory duties, such as issuing licences.
- 2.29 Our emphasis on providing clarity and streamlining policies is intended to improve the speed and smoothness of the licensing process for radio amateurs, other licensees and Ofcom. This is part of a wider programme of work looking to standardise our spectrum licensing processes to enable us to improve the service that we provide to licensees.

<sup>&</sup>lt;sup>7</sup> Amateur radio licence guidance for licensees.

#### Phasing the implementation of the proposed changes

- 2.30 Implementing our proposals would involve three phases of work:
  - a) Phase 1: changes to the amateur radio licence through variation;
  - b) Phase 2: changes requiring minor modification to the current licensing platform or other specific action from Ofcom (but not the new licensing platform); and
  - c) Phase 3: changes requiring the new licensing platform to be in place.
- 2.31 In section 7 we set out our provisional timelines for these phases, which may be subject to change. We will provide further updates on implementation timelines in our policy statement later this year, and as needed thereafter.

## 3. Review of the licensing framework

3.1 We last reviewed our licensing framework for amateur radio in <u>2006</u>, when we introduced the lifetime licence regime. As part of our current review we have looked again at the licensing framework (the types of licences available and how we deliver them).

### **Overview of proposals**

- 3.2 In this section we set out proposals to:
  - Embed many Notices of Variation in the standard licence terms, and streamline the process for other NoVs where possible;
  - Maintain the current three-tier licence framework;
  - Continue with the 'lifetime' licence duration but seek to improve the online revalidation process;
  - Introduce a new policy that licensees must only hold a single personal licence therefore, as a licensee progresses through the three-tier structure, the previous licence would be revoked; and
  - Change our rules to allow third-parties to operate the radio equipment if under direct supervision of a licensee.

# We propose to embed many Notices of Variation in the standard licence terms, and streamline the process for other NoVs where possible

- 3.3 A number of our consultation proposals relate to Notices of Variation (NoVs). We want to ensure that the processes and rules for obtaining these NoVs are clear, open, transparent and efficient, and are only required where there is a clear spectrum management reason to do so.
- 3.4 We have consequently reviewed the NoVs that we issue in light of our spectrum management duties, and are proposing to include authorisation for operations that are permitted by several of the current NoVs in the standard amateur radio licence, where we do not think this would lead to increased interference risks. In cases where we consider there to be a spectrum management reason to maintain a requirement for a NoV to undertake a specific operation we have sought to simplify the rules about obtaining the NoV and the conditions within it where possible; we have also considered where we could automate the process to obtain a NoV. We discuss our proposed approach to specific NoVs in sections 4 and 5 of this document.

### We propose to maintain the current three-tier licence framework

3.5 As set out in section 2, Ofcom issues 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 and practical skill through the recognised examination.<sup>8</sup>

3.6 We are not proposing to change this three-tier system. The existing approach enables individuals to progress and ensures that authorisation to operate at increased power levels is accompanied by increased skill and responsibility. It also reflects the international requirement that radio amateurs are technically and operationally competent.

#### We are not proposing to introduce a licence below Foundation level

- 3.7 The lowest level of licence a person can apply for is the Foundation Licence which is designed to encourage new entrants to the hobby. Some licensees are happy to remain at this level and not progress any further and we are happy for them to do so.
- 3.8 We have considered the arguments made by some parties that it might be beneficial to introduce a new entry level licence, which has lower requirements than the Foundation Licence, in order to encourage more people to the hobby. This could allow people to learn how to use the equipment and gain confidence in speaking on the air. On balance, we still consider that the Foundation Licence remains the appropriate entry point for radio amateur personal licences, meeting the needs of the hobby and the UK and international requirements placed on Ofcom.
- 3.9 The Foundation Licence <u>was introduced in 2002</u>. The syllabus and exam are designed to cover the necessary basics required to enter the hobby and operate. We note that the <u>current pass mark for the Foundation Licence exam is high at 86.1 percent</u>.<sup>9</sup> Since 2010, we have seen a 140 percent increase in Foundation licensees compared to 4.7 percent increase in Full licensees.<sup>10</sup> During the recent pandemic the RSGB made great progress in expanding the availability of exams and now all levels can be taken online. This resulted in significantly more people taking the exams, with most taking the Foundation level exam, with the pass rate remaining high as can be seen in Figure 3.

<sup>&</sup>lt;sup>8</sup> Ofcom oversees the examination system through the <u>Exam Standards Committee</u>. The examinations and assessments are carried out by the RSGB.

<sup>&</sup>lt;sup>9</sup> RSGB. 2022. <u>The Annual Report of the RSGB Examination Standards Committee</u>, p. 3.

<sup>&</sup>lt;sup>10</sup> June 2010 13,349 Foundation licences on issue and 51,776 Full licences – source Ofcom.

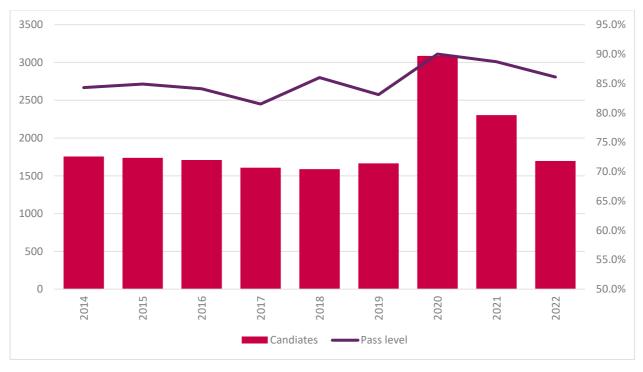


Figure 3: Amateur radio (Foundation) licence exam pass rate

Source: RSGB Exam Standards Committee annual reports.

- 3.10 Under Article 25.6 of the Radio Regulations we are required to verify the operational and technical qualifications of any person wishing to operate an amateur station. We believe that to introduce an exam below the current Foundation level qualifying exam would run the risk of falling below the minimum recommended standards of competence which are required. We recognise that for some people taking an exam may be daunting; however amateur radio clubs offer in person and online training that can assist candidates with passing the exam. In addition, the RSGB has in place a range of options available to assist any candidate with accessibility needs.<sup>11</sup>
- 3.11 Those wishing to use radio equipment casually, without pursuing the essence of the amateur radio hobby, may already use several licence-exempt services, such as Citizen's Band (CB) radio and Private Mobile Radio using 446 MHz (PMR446). Neither of these requires the passing of an exam or obtaining a licence from Ofcom. For many years CB Radio has provided a popular route into the amateur radio hobby.
- 3.12 On the basis of the above, we consider that the existing licensing structure meets the needs of the hobby and the UK and international requirements placed on Ofcom. We are satisfied that the current Foundation Licence enables ease of entry into the hobby for newcomers, while meeting the need for the candidate to demonstrate operational and technical competence.

<sup>&</sup>lt;sup>11</sup> <u>Radio Amateur Examination Specification</u> page 1.5.

3.13 Further, we note that some of the proposals in this document, such as allowing nonlicensed amateurs to operate equipment, would enable novices to gain experience of the hobby whilst being under the direct supervision of a licensed radio amateur.

# We propose to continue lifetime licences but improve the online revalidation process

- 3.14 Amateur radio licences in the UK are currently valid for an indefinite period. Nonetheless, clause 6 of the current licence imposes an obligation on licence holders to revalidate their licences every five years via the licensing portal on the <u>Ofcom website</u>. Clause 4(5) allows us to revoke an amateur radio licence, if the licence holder fails to do so.
- 3.15 However, we have experienced problems with the functionality of our current licensing platform for enabling a simple process for revalidation. This has deterred some licensees from trying to revalidate their licence. As a result, we have revoked a comparatively small number of licences for a beach of Clause 4(5) and our licensing database is becoming increasingly out of date. As detailed in the paragraphs below, this creates risks for spectrum management (if, for example, we need to take urgent action to manage interference) and also generates additional pressures on our licensing administration systems.
- 3.16 While we have considered alternative approaches such as a fixed term licence, we plan to maintain the lifetime licence term with a revalidation period. Moving to a fixed term licence would resolve the challenges being experienced around revalidation but would introduce complexity to the process as we would need to set up a process for licensees to reapply for their licence.

#### We plan to improve the system for licence revalidation

- 3.17 We plan to improve the revalidation online process as part of our wider Licensing Platform Evolution (LPE) project. The new platform will provide a better online journey for all our stakeholders, including a far easier process to revalidate licences, and will enable us to continue to provide an efficient spectrum licensing service into the future. This would be delivered as part of our phase 3 implementation.
- 3.18 Following the implementation of these improvements, we would take action to revoke those licences which have not been revalidated, in line with current licence conditions. We will provide further communications on the need to validate their details and how this can be done before proceeding with our standard revocation process. Any proposal to revoke a licence will be in accordance with the procedure set out in Schedule 1 of the WT Act. Licensees will be notified of our proposal to revoke their licence, and the reasons for us doing so, and will be given a period of at least 30 days to make representations. If a licensee does not respond, this is likely to lead to the revocation of the licence. However, revalidating at any point in the process will reinstate the licence and halt the process.

# We propose that licensees should only hold a single personal licence

- 3.19 Many holders of amateur radio licences have progressed through the three classes of amateur radio licences, from Foundation to Intermediate then to Full. When a licence holder progresses, there is currently no requirement for them to surrender or for Ofcom to revoke their lower-level licences. As a result, a number of licensees have accumulated multiple licences and call signs. We propose that licensees should only hold a single personal licence. Club licences are excluded from these proposals.
- 3.20 We believe that this proposal is necessary to ensure the unique identity of a station is maintained. This is best achieved by each licensee only being identified by one personal (as opposed to club) call sign. This reduces to an absolute minimum the risk of a station's identity being misleading, consistent with Article 19.2 of the Radio Regulations which prohibits this.
- 3.21 There are also efficiency benefits to this proposal, as the duplication of records in the licensing system places additional costs and administrative burdens on Ofcom. For example, these may arise from holding more records than in principle should be required, duplicate correspondence being sent to the same individual, challenges where there are discrepancies in personal details across different licences held by one person (which could, for example, delay enforcement action) or Ofcom having to undertake specific new work to try to minimise this. We see no spectrum management reason for a station to be identified with multiple concurrent personal licences.

# We propose that existing licensees with multiple personal licences retain the highest level licence, nominating which licence they wish to keep where relevant

- For us to revoke a licence where a person holds only one personal (as opposed to Club)
   licence, we need to add an additional ground for revocation in the amateur radio licence.
   This would be carried out as part of phase 1 of our implementation plan.
- 3.23 Following this, in cases where we find that someone holds more than one amateur radio licence (other than a Full (Club) Licence) we would be able to revoke all but the highest class of licence. Where a licensee holds more than one licence at this level, we propose that they be required to choose which single licence (and call sign) they wish to retain and we would revoke the other licence(s).<sup>12</sup> We would propose to begin this as part of phase 2.
- 3.24 We also propose that, in future, if we were to receive an application for an additional licence of the same or lower level, we would refuse it.

<sup>&</sup>lt;sup>12</sup> 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.

# We propose that as licensees progress, their lower level licence would be revoked

- 3.25 We propose that when a licensee progresses to the next level of licence, the lower level licence would be revoked. For example, when going from Intermediate to a Full Licence, the Intermediate Licence would be revoked, leaving the licensee with the Full Licence alone. This would stop the number of licensees holding multiple licences from increasing.
- 3.26 To implement this, we are proposing a new provision to be included in the grounds for revocation section of the licence, as part of our proposed implementation phase 1. This would enable Ofcom to revoke a licence if the licensee were to acquire an amateur radio licence at a higher level following the completion of our implementation phase 3.

**Question 1:** Do you agree with our proposal that each licensee should only be able to hold one personal licence? Do you have any other comments on this proposal?

# We propose to allow greater supervised third-party use of radio equipment

- 3.27 Amateur radio provides an opportunity for people to connect with others from around the world and experiment with radio technology. One way to encourage people to get involved is to showcase the opportunities that amateur radio can bring.
- 3.28 The RSGB, amateur radio clubs and others regularly reach out to encourage individuals, especially young people, to participate in the hobby. This can include providing demonstrations for schools and scout and guide groups, where they can try amateur radio and even <u>speak to astronauts on the International Space Station (ISS)</u>. We believe that a benefit of allowing more, controlled, use of amateur radio equipment is that more people may develop an interest in the hobby and radio skills, some of whom may then go for the Foundation-level examination and licence.
- 3.29 We believe that the current rules concerning who may operate the radio equipment are too complex and restrict the ability of the hobby to showcase itself. The relevant rules are set out in Clause 3 of the current amateur radio licence, which restricts the use of the radio equipment only to the licensee, subject to the following exceptions:
  - a) if the other person holds an Ofcom issued amateur radio licence and operates in the presence of and under the direct supervision of the licensee;
  - b) if it is a Full Licence or Full (Club) Licence:
    - i) by a person on a Recognised Foundation Training Course;
    - ii) by a person who holds a current radio amateur licence issued by any other country; or
    - iii) by any person providing that they are not disqualified, and they hold a Radio Amateurs' Examination Pass Certificate.

- c) If it is a Full (Club) Licence and for use on behalf of a club another club member who holds a full licence can supervise others on behalf of the licensees.
- d) Clauses 3(4) and 3(5)(b) also allows a non-licensed person to send a message providing that the radio equipment is operated by a Full or Full (Club) licence holder.
- 3.30 Under the current rules there are many instances where a licensee would be in breach of their licence if another person were to speak on the radio or use the radio equipment, for instance if a member of a scout group sends a Morse code message. The licence further distinguishes between sending a message and operating the radio equipment, which we believe is confusing and is not relevant to the use of the spectrum.

#### We propose to simplify the rules on third party use

#### Proposed new rules for individual licensees

- 3.31 We believe that the current rules concerning who may operate the radio equipment are too complex and restrict the ability of the hobby to showcase itself. We therefore wish to simplify the rules, while ensuring that the licensee remains ultimately answerable for the operation of the radio equipment.
- 3.32 We propose that anyone should be able to use the radio equipment, providing that this is under the direct supervision of the licensee (with separate provisions for Full (Club) Licences). 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 operation of the radio equipment. This is the approach that we have adopted for the use of radio on ships and aircraft, for example, where safety of life is a consideration.
- 3.33 This would be carried out as part of phase 1 of our implementation plan.

#### Proposed new rules for Full (Club) licences

- 3.34 For Full (Club) Licences, we are proposing to make it easier for people to participate in activities. At present holders of Full Licence may operate the club's station unsupervised, or supervise third parties to do so, if the holder of the Full (Club) licence has permitted them to do so. However there are a number of restrictions about what activities may be undertaken, and by whom.
- 3.35 We propose to provide more freedoms to clubs in their operation, so that where the licensee has agreed, any Full licensee may supervise others (without licences) to operate the radio equipment. Currently, these supervised users may only send a message.
- 3.36 This would be implemented as part of phase 1 work.

**Question 2**: Do you agree with our proposals to permit greater supervised use of the radio equipment by others? Do you have any other comments on this proposal?

### 4. Proposed changes to call signs

### We propose to make some changes to call sign policies and formats

- 4.1 Call signs are the primary method amateurs use to identify themselves when communicating with other operators. Each amateur radio licensee has a unique call sign, by which they can be identified. This is important for spectrum management as it enables receiving stations to know who is calling them and so ensures compliance with relevant international agreements<sup>13</sup> and identification of the source of any problematic signals, facilitating resolution of any such issues. We are aware that call signs play an important role and are used by amateurs to represent themselves in the hobby.
- 4.2 However, we now consider that our current policies on call signs go beyond their core spectrum management purpose of identifying stations and are too complex. This creates uncertainty for licensees and is reflected in the nature and volume of casework that we handle related to call signs.<sup>14</sup> We are therefore proposing a number of measures to align the management of call signs more closely to their spectrum management function, removing any unnecessary regulation, together with providing simpler and clearer arrangements for licensees. We have also considered where it might be possible to automate some processes.
- 4.3 In this section we outline our proposals to:
  - Introduce a new M8 and M9 call sign prefix for the Intermediate Licence to replace the current approach;
  - Make the use of Regional Secondary Locators ('RSLs') optional;
  - Allow the wider use of the RSL 'E' for England by all licence classes;
  - Make it easier for licensees to use Special RSLs;
  - Clarify the use of call sign suffixes;
  - Make available the full range of unused amateur call signs via the online portal;
  - Permit licensees to periodically change their call sign;
  - Restrict the number of call signs an individual can hold to one; and five for Full (Club) licences; and
  - Liberalise the use of Special Event Station assignments.

### **Current UK call sign format overview**

- 4.4 The call signs that we assign comply with the internationally agreed format as set out in the Radio Regulations:
  - The initial character of our amateur radio call signs is always 'G', 'M' or '2', denoting that the station is authorised by the UK;

<sup>&</sup>lt;sup>13</sup> Articles 19.4 and 25.9 of the Radio Regulations

<sup>&</sup>lt;sup>14</sup> In 2022 we received 4045 calls and had 3316 cases (application and emails) relating to amateur radio to our Spectrum Licensing team.

- The second character is a number. Taken together with the initial letter, these elements denote the class of amateur radio station (Foundation, Intermediate or Full);
- The call sign is completed by three letters.<sup>15</sup>
- 4.5 Under the current rules, an applicant for an amateur radio licence can either select their own preferred call sign or leave it to our licensing system to choose a call sign. Currently, our system assigns call signs in the formats shown in column two of Table 2, below.

Licence level	Current default call sign format	Call sign formats formerly used
Foundation	M7aaa	M3aaa, M6aaa
Intermediate	2#0aaa	2#1aaa
Full and Full (Club)	M0aaa	G1aaa, G3aaa, G4aaa, G6aaa, G7aaa, G8aaa, G0aaa, M1aaa, M5aaa <u>Used before WW2; no longer issued:</u> G2aa, G3aa, G4aa, G5aa, G6aa, G8aa, G2aaa
Full (Temporary Reciprocal)	M#/ccccccc	None

Table 2: Format of UK amateur radio call signs

Notes to table: 'a' is any letter of the alphabet; '#' is an RSL, explained below; 'cccccccc' is an overseas call sign

- 4.6 If an applicant wishes to select a call sign they may do so providing that:
  - a) it has the correct prefix for the class of licence (see Table 2, above);
  - a) it is otherwise in the correct format;
  - b) it is not currently assigned under an amateur radio licence;
  - c) it has not been assigned under an amateur radio licence that was surrendered, revoked or otherwise cancelled in the past two years; and
  - d) it has not been withheld because:
    - i) it is offensive; or
    - ii) It is prohibited by international agreement.<sup>16</sup>

<sup>&</sup>lt;sup>15</sup> Very old call signs, a small handful of which remain in use, have only two trailing letters.

<sup>&</sup>lt;sup>16</sup> For example Article 19.48 of the <u>Radio Regulations</u>.

# We propose to introduce a new M8 and M9 Intermediate call sign format

- 4.7 As we highlight above, 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.<sup>17</sup> To confirm with Article 19 we require licensees to insert a Regional Secondary Locator ('RSL') into an Intermediate call sign, to split the digits (so the initially assigned call sign e.g. '21ABC' must become the transmitted call sign of e.g. '21ABC').
- 4.8 We understand that this call sign format is not universally popular with radio amateurs and that the terms are complex.<sup>18</sup> We are therefore proposing a new format for Intermediate Licence call signs which would be consistent with Foundation, Full and Full (Club) call signs. It would allow us to apply uniform rules on the use of RSLs. In time, it would hopefully lead to a consistent format of call signs for Intermediate stations, making it easier for radio amateurs worldwide to understand UK call signs.
- 4.9 If we were to proceed with these proposals they would be introduced as part of our phase 2 work.

#### We propose that all new Intermediate Licence call signs start with M8 or M9

4.10 We propose to cease assigning call signs starting with '2' to Intermediate stations, instead, we propose to issue call signs starting with 'M8' or 'M9' (e.g. 'M8ABC'). We propose to take this approach in all cases including for new Intermediate Licence and former holders of an Intermediate Licence returning to the hobby, even if they had held a call sign starting with '2' previously.

# We would encourage existing Intermediate Licence holders to take up the new format

4.11 We would encourage existing Intermediate licensees to opt to change to a call sign with the new prefix. To facilitate those who wish to move to the new format we propose that where a call sign is on issue in the current format we would reserve the corresponding call sign suffix in the new format, and it would be available only to the current Intermediate licensee for three years. For example, the call sign 'M8ASD' would be available only to the current holder of call sign '20ASD'; the call sign 'M9DSA' would be available only to the current holder of '21DSA'. We believe that this should give adequate time for existing

<sup>&</sup>lt;sup>17</sup> The <u>Radio Regulations</u> are globally-agreed rules on the use of radio, published by the International Telecommunication Union. Article 19 concerns identification of stations.

<sup>&</sup>lt;sup>18</sup> The current licence reads as follows: "2(2) The Licensee shall use the following appropriate Regional Secondary Locator after the Callsign prefix "G", "M" or "2" as specified in Section 1, when identifying the Radio Equipment in accordance with Clause 13(1):

<sup>[</sup>List of RSLs]

If the Callsign specified in Section 1 begins with the number "2", the provisions of Clause 2(2) shall apply with the addition that when used in England, the Secondary Locator "E" shall be used."

Intermediate licensees to change. After three years, these call signs in the new format would be available to any applicant for an Intermediate Licence.

4.12 If preferred, an Intermediate licensee could choose a new call sign with a different suffix from their existing call sign. As set out in paragraphs 4.39 to 4.42, we are also proposing to allow licensees to change their call sign and to do so online. If that were implemented, changing to the new format of Intermediate call sign would be available with minimum fuss.

# At this stage we are not proposing to require existing intermediate licensees to give up their existing call sign

- 4.13 We are not proposing at this stage that existing licensees must give up their existing '2' call sign<sup>19</sup>. However, they must continue to insert the RSL into their call sign when transmitting.
- 4.14 We would expect the number of Intermediate licensees with a call sign starting with '2' to diminish over time due to new licensees being issued with the proposed new format, some existing Intermediate licensees migrating to this and licences expiring if they progress to the next level. We may in future consider proposing a licence variation to phase out the '2' call sign format for all intermediate licences.<sup>20</sup> This would create uniformity across all Intermediate call signs.

**Question 3:** Do you agree with our proposal to use M8 and M9 for Intermediate licensees going forward? Do you have any other comments on this proposal?

# We propose to make the use of Regional Secondary Locators (RSL) optional, with simpler rules

#### We propose to make the use of RSLs optional

- 4.15 An RSL is a letter inserted after the initial character of the call sign ('G', 'M' or '2') and denotes the UK nation or Crown Dependency where the licensee is operating, be it the main station address or elsewhere.
- 4.16 The amateur radio licence has complex rules which require that a RSL must be used by the licensee when transmitting their call sign in some situations, but not in others. An RSL is a letter inserted after the initial character of the call sign ('G', 'M' or '2') and denotes the UK nation or Crown Dependency where the licensee is operating, be it the main station address or elsewhere. For example, if a licensee were not to include the RSL 'W' in their call sign when operating in Wales, it would be a breach of the terms of their licence. However, such a condition is not placed on licensees operating in England under a

<sup>&</sup>lt;sup>19</sup>Where they continue to hold the licence.

<sup>&</sup>lt;sup>20</sup> In the event that we were to develop such proposals, we would follow the statutory process relating to proposed licence variations as described in paragraphs 7.19 to 7.24

Foundation or Full Licence, but is required of Intermediate Licence holders operating in England.

- 4.17 The use of an RSL is not mandated or even provided for by the Radio Regulations; further they do not contribute to the efficient use of the radio spectrum. We do not believe that it is appropriate to continue including legally enforceable requirements that do not appear to be necessary to fulfil our spectrum management duties or objectives.
- 4.18 We recognise that RSLs have strong significance for some radio amateurs and understand that they can play a role in amateur radio contesting and other challenges such as <u>DXCC</u>.
- 4.19 Given this, we are proposing to remove requirements in the licence to use RSLs<sup>21</sup> and make their use optional for licensees. This would allow those licensees who wish to continue using an RSLs the ability to do so.
- 4.20 The proposed amended text is set out in Condition 6.21 of the Proposed Amateur Conditions Booklet contained in Annex 2. We propose to keep in the licence the list of RSLs that licensees may use. This proposal would be implemented via a variation to the licence in phase 1 of our work.

#### Current Intermediate licensees will need to continue to insert an RSL

4.21 The exception to this approach is that the amateur radio licence requires Intermediate licensees to use an RSL, wherever they may be, including in England. As set out in in paragraph 4.10, we have proposed to introduce a new call sign format for Intermediate licensees but any current licensees who continue to use the format 21ABC/20ABC will need to continue to insert an RSL to remain in accordance with the Radio Regulations.

# We propose to permit the optional use of the RSL 'E' for all licence classes when operating in England

- 4.22 As far as we can determine, the RSL 'E' has never been generally available for stations when operating in England other than for holders of an Intermediate Licence. The basis for this is unclear, hence we propose that the RSL 'E' be available for use by any station, when operating in England (clubs operating in England may already choose to use the RSL 'X').
- 4.23 Available RSLs under our proposals would consequently be as shown in Table 3, below.

#### Table 3: Available RSLs (proposed)

Nation or	RSL available under all	RSL available under
dependency	individual licences	club licences
England	E	E or X
Northern Ireland	I	l or N
Scotland	M	M or S
Wales	W	W or C
Guernsey	U	U or P

<sup>&</sup>lt;sup>21</sup> With the exception of intermediate licensees who choose to retain a call sign beginning with '2'.

Nation or dependency	RSL available under all individual licences	RSL available under club licences
Jersey	J	J or H
Isle of Man	D	D or T

- 4.24 We are not proposing any other changes and unless stated in this document we are proposing that our existing policy on RSLs remain unchanged. We would update our <u>policy</u> <u>on temporary call signs and call sign enhancement</u> to reflect any changes that we make following this consultation.
- 4.25 The proposed text to amend the licence is set out in the Proposed Amateur ConditionsBooklet. If we were to proceed with this change it would be implemented as part of phase1.

#### We propose to simplify the process for authorising special RSLs

- 4.26 We permit the occasional use of special RSLs to mark special occasions such as royal coronations and other significant national events. A recent example of this was the use of "Q" to mark the period of national mourning in 2022. At the moment, to 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. Using a special RSL without this NoV would be a breach of their licence.
- 4.27 We are proposing to simplify this process by amending the amateur radio licence to allow licensees to use any special RSL as notified by Ofcom. This amendment to the licence would mean that licensees would no longer need to apply for an NoV to use the special RSL. Instead, once a notification had been issued by Ofcom on our website, a licensee would be able to use the special RSL straight away. We believe that that this measure would help reduce the administrative burden for licensees and Ofcom by simplifying the process.
- 4.28 The proposed amendment is set out in Condition 6.22 of the Proposed Amateur Conditions Booklet and would be implemented as part of phase 1.

**Question 4:** Do you agree with our proposals to change our policies on the use of RSLs? Do you have any other comments on this proposal?

### We propose to simplify licence terms on the use of call sign suffixes and allow their use on an optional basis

4.29 A 'suffix' is a group of one or more letters added to the end of the call sign, following the 'slash' ('/') character. These have typically been used to indicate that the station is not at

its main station address. The amateur radio licence currently recommends four suffixes<sup>22</sup> but does not mandate their use.

#### We propose to remove references to some specific suffixes in the licence

4.30 Although not mandated in the amateur radio licence, these four suffixes are referenced in a number of areas. The very complex rules around the waterborne use of 'M' ('Mobile) and 'MM' ('Maritime Mobile'), for example, are confusing and it is unclear how enforcing them would support our duty to manage the radio spectrum. 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 these four specific suffixes should be referenced in the licence. We therefore propose to remove the references relating to these from the licence.

# We propose to amend the licence to make clear that licensees may use suffixes

- 4.31 In recent years, we have allowed the use of some other suffixes, for example allowing radio amateurs to celebrate the National Health Service or Youth On The Air (<u>YOTA</u>). The feedback we have received has been positive and has shown that this is a good way for radio amateurs to get behind such occasions.
- 4.32 We appreciate that these remain of great interest to the hobby but do not think there is a role for the spectrum regulator in managing their use. We are therefore proposing to amend the licence provisions relating to the use of suffixes as above and to make clear that licensees are allowed to use whatever suffix they wish,<sup>23</sup> as long as the station remains clearly identifiable at all times. The proposed amendment is set out in Condition 6.23 of the Proposed Amateur Conditions Booklet and would be implemented as part of phase 1.

**Question 5:** Do you agree with our proposals to allow the use of any suffix? Do you have any other comments on this proposal?

### We propose some changes to our call sign assignment policies

4.33 We have considered a number of our policies surrounding the assignment of call signs, taking account of stakeholder requests and ensuring that we comply with the Radio Regulations and manage the spectrum effectively.<sup>24</sup> Given that call signs do not have a wider spectrum management role other than identifying the licensee when transmitting, we are proposing to make changes to our approach to simplify, standardise and automate some of these processes.

<sup>&</sup>lt;sup>22</sup> 'A', 'P', 'M' and 'MM'.

<sup>&</sup>lt;sup>23</sup> Any abuse of this facility would be handled under our established procedures.

<sup>&</sup>lt;sup>24</sup> Some of the current policies are set out in our <u>amateur radio licence guidance for licensees</u>.

#### We propose to allow old call signs to be reissued online

- 4.34 Some applicants like to choose a call sign, perhaps to match their initials, and we are happy to allow this if the requested call sign is available.<sup>25</sup> At present, where the desired call sign is from the current series,<sup>26</sup> applicants may request it online. For a call sign with any other permissible prefix, licensees must submit a manual application. These incur a £20 fee, and it is slower, as we must process the application manually which imposes an administrative burden on us and the applicant.
- 4.35 In a move to automate this process we are proposing to make it possible to select all available post World War 2<sup>27</sup> call signs as part of the online application process. Applicants would be able to select from any of these call sign blocks when they applied for their licence.<sup>28</sup> We believe this change would offer a superior service to licensees, enabling them to obtain their licence more quickly, since they would no longer need to apply via an application form. It would also benefit us, because it would enable us to manage our stocks of call signs more efficiently, reducing the administrative burden created by casework.
- 4.36 Applicants who leave it to the system to choose a call sign would be assigned a hitherto unused call sign from the current series; call signs would only be reused where expressly requested.<sup>29</sup> However we recognize that the proposed change may result in previously assigned call signs coming back into use, including those that were formerly used by another radio amateur who had died. As per current practice, all call signs would only become available for assignment following the usual two-year rest period after the cessation of their former use.
- 4.37 We are aware that some radio amateurs feel that reusing call signs could cause family members distress, if they were to hear a call sign on-air which formerly identified a relative who had died. We also understand that some call sign websites may be slow to update their records, so might send correspondence to a late radio amateur, which was actually intended for the subsequent user of the call sign. However, we believe that our two-year policy should be sufficient.
- 4.38 This would require changes to the licensing system, and we would need to wait until our new platform is in place. Therefore, these proposals would be implemented as part of phase 3 of the implementation plan.

<sup>&</sup>lt;sup>25</sup> 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.

<sup>&</sup>lt;sup>26</sup> 'M7' for Foundation, '20' for Intermediate and 'M0' for Full.

<sup>&</sup>lt;sup>27</sup> These begin G2 or a call sign with only two letters in its suffix.

<sup>&</sup>lt;sup>28</sup> If we implement our proposal to enable radio amateurs to change their call sign, the same process would apply.

<sup>&</sup>lt;sup>29</sup> We are sometimes asked to allow a radio amateur to adopt a call sign previously used by a relative, such as a parent or grandparent. In this consultation we are separately proposing to allow licensees to change their call sign periodically. If we implement that proposal, a licensee could change their call sign to one formerly used by a relative if available.

### We propose that when our new licensing platform has been implemented, we could allow licensees to change their call sign periodically

- 4.39 At present, an amateur radio call sign may be changed only in exceptional circumstances. For example, this might be because a radio amateur has acquired a physical or mental impairment, preventing them from using the existing call. We have not permitted changes more generally, to preserve the unique identity of stations. However, we often receive requests from licensees to change call sign, for example, to use a deceased relative's call sign instead of their existing one. Our current policy is to refuse permission, unless under exceptional circumstances, as we do not permit licensees to change call signs.
- 4.40 We are aware that some other countries do permit call signs to be changed. We have consequently reviewed the policy and the reasons for it being applied. We now consider there is no reason why we could not permit licensees to periodically change their call sign, providing that measures are put in place to ensure that the identity of the licensee remains clear. This is important because radio signals can travel great distances so, should a signal cause a problem, the identity of the source of the transmission can be easily identified.
- 4.41 To enable more flexibility whilst also ensuring that the identity of the licensee is clear we propose that once a call sign has been changed, we would not permit it to be changed again for another two years other than in exceptional circumstances. Under these proposals a call sign would thus be associated with a radio amateur for at least two years. We believe this would balance the need to avoid misleading identities and the desire of some radio amateurs to change their call sign. We are conscious that this could accelerate the depletion of our supply of call signs, and we would monitor the levels of available call signs.
- 4.42 We propose that the facility to change call signs would be available via the online licensing portal and would only be available once the necessary changes to the licensing system have been implemented. If we proceed with these proposals, we would include these requirements as part of our LPE project with the aim to introduce them when the new amateur licensing platform goes live as part of phase 3. Alternative (offline) arrangements would be available for those with particular needs.

**Question 6:** Do you agree with our proposals to allow a change of call signs? Do you have any other comments on this proposal?

# We are proposing consistent rules on the number of call signs that can be held

4.43 A call sign is the unique identifier by which an amateur radio station is recognised. Over time, various policies have led to complexity in the rules on how many call signs that an individual or club can hold, resulting in some licensees having more than one call sign associated with their licence.

#### We propose that each individual licensee only hold one call sign

4.44 As explained in paragraphs 3.19 to 3.26, we are proposing that individuals would only be able to hold a single licence and therefore we are also proposing they can only use a single call sign at any one time (excluding any temporary special event call signs). This would mean that we would seek to vary any existing licence which permits more than one specific call sign to reduce the number of call signs to one per licence.<sup>30</sup> This is separate from any Full (Club) Licences they may have. If we proceed with this proposal, it would be part of our phase 2 work.

#### We propose that Full (Club) licensees be allowed to hold a total of five licences /call signs

- 4.45 The Radiocommunication Agency ('RA') allowed a club to have two call signs, one for Morse operation and one for non-Morse. Today, we recognise that a club could simultaneously be operating in several different modes, using different bands, undertaking different types of activities and possibly at different locations. We have consequently adapted the RA's principle and we already allow a club to request more than one licence and call sign.
- 4.46 However, we have not set down a formal policy or guidelines about this. In line with our considerations about individuals holding more than one licence we think it would be proportionate to also apply an upper limit to the number of licences held by a club. We propose that clubs should be allowed to hold up to five licences and, thereby, five call signs to support flexibility in their activities. We do not see any reason why a club should require more than this. Under our proposals if a club holds more than this number, we would look to cancel any excess licence(s).
- 4.47 Although we are providing this facility it is not mandatory and a club may choose to use just one call sign for all operation. If a club decides to use the same call sign simultaneously in different scenarios (bands, modes etc), all use must comply with the requirement that the station be clearly identifiable at all times.
- 4.48 Again, we would look to implement these proposals as part of our phase 2 plan of work.

**Question 7:** Do you agree with our proposals on the limits to how many call signs can be held? Do you have any other comments on this proposal?

# We are proposing to simplify the arrangements for most special event call signs

#### Special event call signs are temporary changes agreed for particular events

4.49 In addition to the call sign allocated to the licence, there are some specific instances where we allow the use of an alternative call sign for a time limited period. These are normally associated with temporary stations set up to celebrate a particular event or milestone.

<sup>&</sup>lt;sup>30</sup> We would ask licensees which call sign they would like to keep and which one they would like to give up.

They are used by radio amateurs to help promote their hobby and we recognise that radio amateurs value the ability to use special event call signs.

- 4.50 As it is a condition of the licence that the station be identified only by its usual unique call sign contained in the licence, enabling the use of an alternative one means that we must vary the licence to relax that restriction and to permit the station to be identified by another call sign. We do this by issuing a NoV but only to the holder of an amateur radio Full or Full (Club) licence.
- 4.51 The NoVs that we currently issue, which authorise the use of a different call sign in this context include
  - a) Special Event Stations;
  - b) Special Special Event Stations;
  - c) Permanent Special Event Stations; and
  - d) Special Contest Call signs.
- 4.52 The policies surrounding these when these NoVs can be granted are complex<sup>31</sup> and we consider that some are overly restrictive. Due to these restrictions and the assignment criteria these NoVs generate a significant volume of case work for Ofcom and impose administrative burden on licensees. We are therefore proposing a more streamlined approach to authorising these temporary or occasional stations.

#### We propose a unified, more flexible Special Event Station NoV

- 4.53 At present, there are two types of temporary Special Event Station NoVs that Ofcom provides:
  - a) Special Event Station ('SES'); and
  - b) Special Special Event Station ('SSES'). These may not be applied for more than six months before the start date and call signs issued for both types of NoV must rest for two years before they are available again.
- 4.54 For the SES call sign, we have automated the assignment process via our online licensing system, enabling a quicker service for licensees and Ofcom. A SES allows the station to operate for up to 28 consecutive days using a call sign in the format 'GBxaaa'.<sup>32</sup>
- In contrast, an SSES allows for a more flexible and longer call sign, in the format
   'GBxccccca'<sup>33</sup> but has to be applied for with a slower manual process due to the qualifying criteria that must be met, which are that:
  - The amateur radio SSES is an adjunct to commemorations or celebrations of a nonamateur radio event;

<sup>&</sup>lt;sup>31</sup> <u>Policy on temporary call signs and call sign enhancement</u> Ofcom March 2018, see section 4.

 $<sup>^{\</sup>rm 32}$  'x' is a digit, except 3 or 7 and 'a' is a letter.

 $<sup>^{33}</sup>$  'x' is a digit except 3 or 7, 'c' is a digit or a letter and 'a' is a letter.

- The non-amateur radio event is of national or international significance (examples have included the centenary of the BBC and the Platinum Jubilee of Queen Elizabeth); and
- Those organising the official arrangements for the non-amateur radio commemorations agree to the amateur radio SSES being associated with their event. This requires the licensee to have confirmation from this third party and include it as part of the application.
- 4.56 In spectrum management terms there is no reason for a distinction between an SES and the more administratively burdensome SSES. We therefore propose to discard the distinction between these two types of stations and instead allow more permissive use of a SES NoV. We propose to:
  - a) extend the available call signs up to 11 characters in length, in the format 'GBxccccccca'.<sup>34</sup> Licensees would be able to choose any<sup>35</sup> SES call sign, as long as they started 'GBx' and ended with a letter. Given the additional flexibility we are providing we are proposing not to permit any other formats of call signs outside of this for SES.
  - b) make permanent the decision we took during lockdown to relax the requirement that a SES event must be available to the general public. We believe such a restriction is not required for spectrum management reasons and therefore we propose to remove it.
  - c) reduce the resting period for a call sign from two 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.
  - d) make the NoV valid for up to one year instead just a maximum of 28 days.
  - e) permit the dates of operation not to be consecutive. This would enable radio amateurs to mark a series of events, planned throughout a year.
  - f) permit mobile or peripatetic operation.
- 4.57 We believe that this more flexible authorisation would provide what many Full and Full (Club) licensees have requested over the years and enable them to promote the hobby. In making this change we would be able to fully automate the process meaning that applicants get an immediate decision for their SES requests and would not need to meet complex criteria in order to obtain a call sign of their choosing.
- 4.58 These proposals would require some modification of our existing licensing platform and would be part of our phase 2 work.

# We are not proposing changes to the arrangements for Permanent Special Event Stations and Special Contest Call signs

4.59 We have also reviewed the current arrangements for Permanent Special Event Stations and Special Contest Call signs. It is not currently possible to automate these NoVs, due to the assessment criteria for obtaining one and we will therefore maintain our current

 $<sup>^{34}</sup>$  'x' is a digit except 3 or 7, 'c' is a digit or a letter and 'a' is a letter.

<sup>&</sup>lt;sup>35</sup> Unacceptable combinations of letters would be withheld, as at present.

allocation policies. These represent only a small number of requests each year so the continued administrative burden on all parties is still relatively minor.

#### Overview of the proposed changes to call sign NoVs

4.1 Table 4 sets out a summary of the changes we are proposing to make to call sign NoVs.

Table 4: Current list of available NoVs

Name	What it allows	Criteria	Proposed changes
Special Event Station (SES)	Use of a temporary alternative callsign for a 28-day period	Must hold a Full or Full (Club) Licence Available online. The station may only be established and operated at one specified location and be open to the public.	Amalgamate SES and SSES into a single NoV authorisation that permits a call sign length up to 11 characters and is available online. Events do not need to be open to the public and can be mobile or peripatetic. 28 days do not need to be consecutive and is valid for a period of up to one year.
Special Special Event Station (SSES)	Use of a temporary alternative callsign for up to one year	Must hold a Full or Full (Club) Licence SSES must be applied for in writing; it is not available from the online portal. It must be associated with a non-amateur radio event or commemoration of national significance. The organisers of that event must agree to the amateur radio SSES being associated with their event.	Remove - amalgamate into SES.
Permanent Special Event Station (PSES)	Use of an alternative callsign for a fixed five-year duration	Must hold a Full or Full (Club) Licence PSES must be applied for in writing; it is not available from the online portal. It must be associated with a non-amateur radio museum or similar curated display of national significance.	No changes proposed.

Name	What it allows	Criteria	Proposed changes
		Those responsible for the non- amateur radio museum/display must agree to the amateur radio PSES being associated with their museum/display.	
Special Contest Callsign (SCC)	Use of a shortened three letter callsign	Must hold a Full or Full (Club) Licence	No changes proposed.
		Must supply evidence of having entered at least five approved contests in a list and have accrued five achievement points from the contests entered. Only be used in amateur radio contests of no more than 48 hours duration.	
Special RSL	Use of a special character in the callsign for a fixed duration	All licensees. Must apply and download the NoV.	Withdraw NoV requirement. Authorise all licensees to use the RSL via a notification on the Ofcom website.

**Question 8:** Do you agree with our proposal to simplify special event call signs? Do you have any other comments on this proposal?

### 5. Technical parameters review

- 5.1 Amateur radio has long been involved in the innovation of radio technology and has a history of pioneering technologies such as radar and 4G. We are proposing changes to liberalise the amateur radio licence to give amateurs significantly more freedom to operate without the need to refer to Ofcom on specific arrangements or adversely affecting other spectrum users. This would enable the hobby to continue to expand its contribution to innovation and experimentation. Specifically, in this section we outline our proposals to:
  - Increase permitted transmit power levels in a number of bands for all licence classes;
  - Allow Foundation and Intermediate licensees to use the internet for remote control operation;
  - Incorporate some technical Notice of Variations ('NoVs') into the standard licence terms and conditions to enable a wider range of activities without specific Ofcom consent being required;
  - Liberalise elements of the Foundation Licence to allow more activities including allowing the building of equipment and accessing the 2.4 GHz and 5 GHz bands;
  - Permit low power airborne use in some frequency bands.

# We propose to increase the permitted transmit power for all licence levels

- 5.2 The class of amateur radio licence determines the maximum permissible power level a licensee is able to use. In light of the objectives of this review we have reconsidered the maximum power that we authorise, taking account of the higher power levels permitted by other nearby countries.
- 5.3 For the Foundation and Intermediate Licences, we have looked at bands in which we currently permit the Full Licence to use up to 400 Watts Peak Envelope Power ('PEP'). Where such a band is also available under a Foundation Licence, we propose to increase the maximum permissible power to 20 Watts (13 dBW) PEP. Where it is also available under an Intermediate Licence, we propose to increase the maximum permissible power to 100 Watts (20 dBW) PEP.
- 5.4 For the Full-level licences, where a band is described in the amateur radio licence schedule as being a 'primary' amateur radio band, we are proposing to increase the powers available to 1000 Watts (30 dBW) PEP. As this applies only to so-called 'primary' bands, we do not believe that it would risk disruption to other users as similar or higher powers are already in use in neighbouring countries by radio amateurs.
- 5.5 The maximum powers that we are proposing are set out in full in Table A to C of the Schedule of the Proposed Amateur Conditions Booklet contained in Annex 2. Table5 provides a comparison between existing and proposed maximum permitted powers. The proposed 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).

This should bring the permitted power levels in line with other neighbouring administrations.

Licence class	Old power limit (PEP)	Proposed power limit (PEP)
Foundation	10 Watts / 10 dBW	20 Watts / 13 dBW
Intermediate	50 Watts / 17 dBW	100 Watts / 20 dBW
Full and Full (Club)	400 Watts / 26 dBW	1000 Watts / 30 dBW in bands labelled as amateur primary. Other bands would remain at the current power limit.

5.6 These proposals would be implemented as part of our phase 1 work.

# We propose to retain the use of Peak Envelope Power (PEP) for transmission limits

- 5.7 Taking account of discussions with radio amateurs we propose to retain PEP as the primary measure of radio amateur transmit power for most standard operations, with separate requirements for some specific operations<sup>37</sup> and in relation to EMF safety requirements.
- 5.8 Licensees are separately required to calculate the output of their transmissions in Effective radiated power (ERP) or Effective isotropic radiated power (EIRP) as part of the licence conditions to comply with the <u>electromagnetic field (EMF) safety requirements</u>.

**Question 9:** Do you agree with our proposals to increase transmit power? Do you have any other comments on this proposal?

# We propose to enable all licensees to use internet based technologies for remote control operation

5.9 We are proposing that any licensee may use a non-amateur frequency method of connection such as the internet. Currently, only the holder of a Full Licence may use a non-amateur frequency method of connection; Foundation and Intermediate Licence holders are not able to use links such as Wi-Fi or the internet. We see no spectrum management reason why this should be the case and we are proposing that all licensees would be able to use any communication links to control the radio equipment.

<sup>&</sup>lt;sup>36</sup> 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.

<sup>&</sup>lt;sup>37</sup> 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.

5.10 The draft licence condition for this proposal is set out in Condition 6.9 of the Proposed Amateur Conditions Booklet and if we decide to proceed with this proposal it would be implemented as part of the phase 1 licence variation.

**Question 10**: Do you agree with our proposed changes to remote control operation? Do you have any other comments on this proposal?

# We propose to allow the deployment of most beacons, gateways and repeaters without the need to apply for an NoV

- 5.11 We permit some amateurs to operate their radio equipment as a repeater, gateway or beacon, on request. These are not covered in the normal licence terms and conditions and instead radio licensees must apply to Ofcom for a Notice of Variation ('NoV') to the licence. The NoV temporarily alters elements of the licence and imposes certain additional obligations on the licensee in respect of the additional permitted activities.
- 5.12 Of com receives a significant volume of requests for beacon, gateway and repeater NoVs each year. We have reviewed the current arrangements for these uses and believe that changes can be made to incorporate many of these NoVs into the standard amateur radio licence without increasing the risk of undue interference being caused.
- 5.13 Details of our proposals for beacons, gateways and repeater conditions are set out below. Our proposals should extend the types of use that the radio equipment can be put to. The proposals are not intended to remove any existing forms of operating from the standard licence; licensees that already hold an NoV to permit this use should be able to continue this when the NoV lapses if their operation falls under the new proposed licence. The small number of NoVs relating to the use of beacons, gateways and repeaters that would continue to fall outside of these provisions (for example, owing to very high power levels being permitted) would continue to operate as they do now.
- 5.14 Operating some repeater, gateway or beacon equipment requires a licensee to secure a specific call sign from the RSGB for that equipment. We are not proposing any changes to this arrangement as part of this consultation.
- 5.15 All of these proposed changes would be implemented via a variation to the licence and would be part of our phase 1 implementation plan of work.

# Licensees will need to ensure that the owner of remote equipment can be readily identified

5.16 As this equipment can be used remotely at locations is located other than at the main station address, we must be able to identify the owner of the equipment when investigating reports of interference or compliance with the electromagnetic fields (EMF) provisions in the amateur radio licence. For this reason, we are proposing that in these cases the licensee must, either on the equipment or close by, have displayed information that allows Ofcom to determine who the owner of the equipment is. We propose that this be at minimum the licence number of the licensee.

## We are proposing to enable some beacon use without a NoV

- 5.17 Amateur radio beacons are radio transmitters that emit a continuous signal on a specific frequency. The signal is typically a Morse code or digital code that can be decoded by amateur radio operators. One use of beacons is to monitor propagation conditions and how radio waves travel through the atmosphere.
- 5.18 The propagation conditions can vary depending on the time of day, the season, and the weather. Beacons can be used to track changes in these conditions and to predict when and where it is possible to make radio contacts. They can also be used to provide a reference signal for amateur radio operators. Amateur radio operators use reference signals to calibrate their equipment and to adjust their antennas.
- 5.19 Currently the rules on operating an amateur radio beacon are not clear. Clause 10(1) permits unattended operation and mentions the deployment of beacons. Schedule 2 of the current licence restricts the unattended operation of beacons in a series of frequency bands around a number of defined locations. However, we also require that to operate a beacon a licensee must apply for an NoV to the licence.
- 5.20 We are proposing that all licensees be able to deploy beacons providing the transmit power limit does not exceed 5 Watts ERP. In addition, we are proposing that Intermediate and Full licensees will be able to transmit at 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 Ofcom.<sup>38</sup> To deploy a beacon, the licensee must not cause interference to other radio users.
- 5.21 To ensure this, we are proposing 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 will not stipulate how this must be done but propose to state in our guidance that one way to demonstrate compliance could be to have the beacons coordinated via the RSGB's <u>Emerging Technology Coordination Committee</u> (ETCC), though this need not be the only method of compliance.
- 5.22 However, 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 could require that the beacon ceases operating.
- 5.23 The draft licence condition for this proposal is set out in Conditions 6.11 and 6.12 of the Proposed Amateur Licence Condition Booklet.

<sup>&</sup>lt;sup>38</sup> Or any other body that Ofcom may designate in the future as being capable of such allocation.

# The current geographic restrictions on unattended beacon use remain in place but we are exploring whether some could be removed

- 5.24 The geographic restrictions on unattended beacon use which protect specific sites, as set out in Schedule 2 of the current licence, will remain in place for the time being.
- 5.25 We are in discussions with the incumbent users about the possibility of removing or relaxing some of these restrictions. If a decision is taken to remove these restrictions, then we will update the guidance to take into account any changes.

**Question 11**: Do you agree with our proposed changes to Beacon operation? Do you have any other comments on this proposal?

# We propose that the licence will enable all licensees to connect to the internet over gateways

- 5.26 A gateway is a radio device through which amateur radio equipment can connect to the internet. These are currently only authorised by an NoV to the licence that allows their use at the main station address. The NoV was needed as a gateway required a special call sign and previously the licence did not allow connecting to the internet.
- 5.27 Radio amateurs now use portable hotspots to connect to the internet from a variety of locations. From the enquiries that we have received on whether this is authorised, it is clear that there is great uncertainty about what is permitted. Further, this ubiquity of internet connectivity brings maintaining a piecemeal authorisation for gateways into question as, from a spectrum management perspective, their normal low power (below 5 Watts ERP) poses only minimal risk of interference.
- 5.28 In view of this, and the benefits of making connection to the internet significantly easier we are proposing to discard the need for a gateway NoV.
- 5.29 The low power amateur radio equipment connecting to the internet would be authorised under the normal licence, permitting licensees at any level to connect to the internet. We also propose to relax the restrictions on unsupervised access, to make it easier for other radio amateurs to gain access to the internet via a gateway. Where a gateway operates in a dog-leg (via a repeater), the general rules for the use of a repeater would continue to apply.
- 5.30 The draft licence condition for this proposal is set out in Condition 6.13 of the Proposed Amateur Licence Condition Booklet.

**Question 12**: Do you agree with our proposed changes to Gateways? Do you have any other comments on this proposal?

# We propose to allow Intermediate and Full Licence holders to deploy repeaters without the need for an NoV

- 5.31 An amateur radio repeater is a device that receives an amateur radio signal and retransmits it, so that the signal can cover longer distances without degradation. The current licence terms and conditions do not permit a licensee to deploy a repeater as this would be unsupervised use of the radio equipment. In order to deploy a repeater, a Full or Full (Club) licensee must apply for a repeater NoV.
- 5.32 We are proposing to relax some of the conditions in the licence to allow Intermediate and Full licensees to deploy a repeater, subject to certain conditions being met. The licensee must ensure all reasonable steps are taken so that their repeater is only used by authorised amateurs; they ultimately remain liable for any transmissions using their radio equipment.
- 5.33 Specifically, we would:
  - allow Intermediate and Full, Full (Club) or Full (Temporary Reciprocal) Licence holders to deploy low power repeaters (under 5 Watts) without the need for an NoV;
  - allow holders of a Full, Full (Club) or Full (Temporary Reciprocal) Licence to deploy repeaters at transmit powers above 5 Watts. For these higher power repeaters, licensees would also need to obtain a specific call sign from the RSGB or other body stipulated by Ofcom.
- 5.34 Due to concerns over the potential for interference, like our proposals for beacons, the licensee will need to demonstrate how they have addressed the risk of interference to other radio users. We will not stipulate how this must be done but coordination via the ETCC process would be one way of demonstrating this.
- 5.35 It is the responsibility of the licensee to take reasonable steps to ensure that the equipment is only used by authorised Radio Amateurs; the licensee remains at all times 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.
- 5.36 The draft licence condition for this proposal is set out in Conditions 6.14 and 6.15 of the Proposed Amateur Licence Condition Booklet.

**Question 13**: Do you agree with our proposed changes to repeaters? Do you have any other comments on this proposal?

#### **Overview of proposed technical NoV changes**

5.37 Table 6 sets out a summary of the changes we are proposing to make to technical NoVs.

Name	What it allows	Criteria	Proposed changes
Beacon	Use of a beacon call sign	Must hold a Full or Full (Club) Licence Subject to a suitable frequency being identified and (for some bands) 'Primary User' agreement	<ul> <li>NoV no longer required in most cases as authorised in the body of the licence:</li> <li>Low power (&lt;5 Watt) beacons may be operated under any level of Licence.</li> <li>Higher-power (5 – 25 Watts) beacons only for Full, Full (Club) and Full (Temporary Reciprocal) Licensees, with a requirement to demonstrate how the risk of interference has been addressed.</li> <li>Any beacon above this power limit will require an NoV from Ofcom.</li> <li>Licensee contact details must accompany unattended beacons.</li> </ul>
Gateway	Where used unattended, establish equipment for unsupervised use by radio amateurs Establish a gateway, to link to the internet Use of a gateway call sign	Simplex internet gateway: Must hold Intermediate, Full or Full (Club) Licence Repeater gateway: must hold a Full or Full (Club) Licence Subject to a suitable frequency being identified and (for some bands) 'Primary User' agreement	NoV no longer required as authorised in the body of the licence. Gateways may be established by licensees at any level. Subject to a maximum transmit power of 5 Watts. Licensee contact details must accompany unattended gateways.
Repeater	Establish a repeater for unsupervised use by radio amateurs Use of a repeater call sign	Must hold a Full or a Full (Club) Licence Subject to a suitable frequency being identified and (for some bands) 'Primary User' agreement	<ul> <li>NoV no longer required in most cases, as authorised in the body of the licence as follows:</li> <li>Low power (&lt;5 Watts) repeaters may be operated under an Intermediate, Full, Full (Club) or Full</li> </ul>

# Table 6: Summary of proposed technical NoV changes

Name	What it allows	Criteria	Proposed changes
			<ul> <li>(Temporary Reciprocal) Licence</li> <li>Higher-power (5 – 25 Watts) repeaters only for Full, Full (Club) and Full (Temporary Reciprocal) Licensees, with a requirement to demonstrate how the risk of interference has been addressed. Any repeater above this power limit will require an NoV from Ofcom.</li> <li>Licensee contact details must accompany repeaters beacons.</li> </ul>
Frequency 70 MHz, 146 MHz and above 250 GHz	Allows access to additional frequency bands	Must hold a Full or Full (Club) Licence	No changes proposed
Special Research Permit	Permits higher transmit power use.	Must hold a Full or Full (Club) Licence. Be for research or experimental purposes only. A full peer-reviewed radio frequency interference and EMF assessment must be provided.	No changes proposed

# We propose to liberalise the Foundation Licence to allow licensees to build their own equipment and access the 2.4 GHz and 5 GHz bands

- 5.38 The Foundation Licence is the entry level to amateur radio. Licensees would have studied and passed the Foundation exam which covers some of the basics of radio but not at a detailed technical level. For this reason they are subject to a number of restrictions including the frequencies and transmit powers they can operate on.
- 5.39 One such restriction is that the Foundation Licence only authorises the use of off-the-shelf equipment (which conforms to our <u>Interface Requirement IR 2028</u>). This is set out in Clause 7(2) of the current licence.

- 5.40 However, to support experimentation by novices we propose to remove this requirement and allow Foundation Licence holders to build their own equipment. Given that all amateur radio licences apply a blanket requirement not to cause interference this, we believe, provides an adequate safeguard to other users.
- 5.41 The Foundation Licence also does not currently allow access to either the 2.4 GHz or 5 GHz frequency bands. These bands are already available to Intermediate and Full Licence holders as well as anyone operating under the licence exemptions conditions set out in <u>IR</u> 2030.
- 5.42 Given the widespread use of these frequency we are proposing to allow Foundation licensees use of these bands subject to a maximum 1 Watt PEP (0 dBw) power restriction by including these in the Schedule of the Proposed Amateur Conditions Booklet. As this would require a variation to the current licence, if we decide to proceed with this proposal it would be implemented in phase 1.

**Question 14**: Do you agree with our proposed changes to allow Foundation Licence holders to build their own equipment and access the 2.4 GHz and 5 GHz frequency bands? Do you have any other comments on this proposal?

# We are proposing to allow low power airborne use in some bands

- 5.43 For many years, the UK amateur radio licence prohibited use of radio equipment on ships or when airborne (i.e. on any form of aircraft, which nowadays includes drones, or balloon). The prohibition on use of amateur radio on ships was removed a number of years ago but the airborne restriction has remained.
- 5.44 From time to time, we receive requests to permit amateur radio equipment to be used airborne and we have therefore reviewed this restriction. Our main focus is to ensure that spectrum is used efficiently and harmful interference is not caused by wireless telegraphy apparatus. Therefore, when considering this matter we need to take into account that the footprint cast by airborne radio transmissions can be significantly greater than those transmitted on the ground. As part of this review, we have also considered the situation in other administrations, a number of whom permit the use of amateur radio airborne.<sup>39</sup>
- 5.45 In some frequency bands that radio amateurs have access to, airborne use is already permitted under our licence exemption regime. Providing the equipment complies with the provisions set out in <u>IR 2030</u> it can already be used airborne without the need for a licence.
- 5.46 Beyond this, we consider that in principle where a frequency band is defined as a so-called 'Primary' amateur band<sup>40</sup> we could allow low power airborne use by amateur radio. We are proposing a power limit of 500 mW EIRP.

<sup>&</sup>lt;sup>39</sup> Austria, Bulgaria, Czech Republic, Germany, Greece, Switzerland, Ukraine and United States of America

<sup>&</sup>lt;sup>40</sup> See list of amateur bands at Annex 2.

- 5.47 We have also received requests, principally from firms and academics, to use amateur radio for commercial-related uses of drones. These stakeholders wish to take advantage of the higher powers permitted for amateurs in licence-exempt bands, for example around 433 MHz. We are quite clear that this sort of use does not conform to the spirit or definition of amateur radio, and we do not propose to permit this sort of use. Anyone wishing to operate a drone may do so under licence exemption<sup>41</sup> or under one of our UAS Licences.<sup>42</sup>
- 5.48 It should be noted that the amateur radio licence only authorises the use of radio equipment in regard to the authorisation under the WT Act. It does not provide any broader authorisation related to airborne operations, airworthiness or supersede any aviation safety rules or requirements. Therefore it should be noted that the use of amateur radio should in no way be used instead of the appropriate aeronautical communications requirements set by the <u>Civil Aviation Authority</u> (CAA).
- 5.49 To make the necessary changes to the licence to permit this would require a change to the licence terms and conditions, therefore if we proceed with these proposals, it would be implemented as part of phase 1.

**Question 15:** Do you agree to Ofcom's proposals to permit some limited airborne use? Do you have any other comments on this proposal?

# We are not proposing changes to the frequency bands available for amateur use in the UK

- 5.50 The amateur radio licence authorises access to many different bands, from LF (135.7 kHz) through to EHF (250 GHz). Some of these bands have been allocated (either by the UK or internationally) to amateur radio. We also authorise access to other bands that amateur radio shares with other users, notably the Ministry of Defence (MOD). Radio amateurs have access to an increasing number of bands, as they progress from Foundation, to Intermediate, to Full Licence.
- 5.51 As part of this review, we are not proposing to add or remove any frequency bands to the licence.

# Access to the bands 70 MHz, 146 MHz and >250 GHz bands will continue to be via an NoV to the amateur radio licence

5.52 Due to the experimental nature of amateur radio, we have made available a number of NoVs that grant access to frequency bands not included in the standard amateur radio licence. These are available to holders of Full and Full (Club) Licences.

<sup>&</sup>lt;sup>41</sup> We have published information about the licence-exempt use of radio equipment on our website.

<sup>&</sup>lt;sup>42</sup> We have published information about our UAS licences on <u>our website</u>.

- 5.53 We are not proposing to include these NoVs in the general list of frequencies in the licence as access to these bands has been granted on the basis of allowing amateur radio to experiment whilst a decision is made on the future use. For example, we permit access to 146 MHz only while the band is not needed for uses authorised under our Business Radio licences.
- 5.54 As this access is only for temporary experimental purposes, we do not believe it is appropriate that they should be included in the standard list of frequencies in the licence. If these were included in the licence, when a decision is made on the future use of these bands it would require Ofcom to vary all licences in order to remove the bands from the licence. With more than 100,000 licences on issue and the requirements placed on us under Schedule 1 of the WT Act in regard to the variation process this would impose significant costs on Ofcom to carry out this work.

## Access to other bands

- 5.55 UK amateurs occasionally request access to parts of other bands. In the case of the 5 MHz band, this band is already allocated for defence use in the UK, as set out in the UK <u>Frequency Allocation Table</u>, and it does not appear feasible for amateur use alongside this.
- 5.56 We also get requests to access other frequency bands outside of the ones allocated to amateur radio such as 40 MHz. Ofcom can permit access to these frequency bands but not under the amateur radio licence. To access these other bands, a stakeholder must apply for a separate <u>Innovation and Trial licence</u>. These licences enable research, development and trials of equipment but have a separate verification process to determine whether the proposed use can be authorised.

# 6. Licence terms and conditions review

# We propose to rationalise the amateur radio licence terms and conditions

- 6.1 We have undertaken a fundamental review of all the terms and conditions in the licence, going beyond the scope of previous licence variation exercises in 2006 and 2014. We have concluded that the current amateur radio licence terms and conditions are too complex and contain some unnecessary provisions, supplementary notes and definitions. Notwithstanding our 29 page guidance document, we continue to receive many specific queries from licensees seeking to interpret the terms of the licence.
- 6.2 We believe that the licence conditions should be clear and easily understandable and not go beyond conditions which are necessary for effective spectrum management. We are therefore proposing changes across the licence to allow radio amateurs greater operating freedoms, whilst maintaining appropriate regulatory control over spectrum use. At the same time, we want 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. A copy of the draft licence and associated terms and conditions can be found at Annex 2.
- 6.3 In this section, we outline the following proposals:
  - Aligning the format and conditions of the licence with other spectrum licences that Ofcom issues;
  - Updating the licence template to simplify and ensure consistency with CEPT Recommendation T/R 61-01;
  - Proposals to create a new Amateur Conditions Booklet, to implement the proposals set out in this document; and
  - Other changes to simplify or clarify the existing licence terms and conditions.
- 6.4 As these proposals all relate to changing the terms and conditions of the licence, they would require the licence to be varied in order to implement any of these proposals. We would plan to do this as part of phase 1 of our plan of work for amateur radio.

# We propose to update the amateur radio licence to have greater alignment with standard Ofcom format and licence conditions

- 6.5 The amateur radio licence currently consists of the licence document issued by Ofcom and a terms, conditions and limitations document (the "Amateur TCL") that users can obtain from the Ofcom website.
- 6.6 We propose to retain this overall structure. However, the current format of the amateur radio licence is substantially different from others that Ofcom issues. We are proposing to change the format of the licence document and the Amateur TCL and the standard terms and conditions with other licence classes, to provide consistency across all the licences that

Ofcom issues, where appropriate. We consider that this is helpful to both Ofcom and licensees, who may hold several different classes of licence, and also supports our broader objectives for simplification and automation where appropriate.

6.7 As part of these changes we also propose to also propose to rename the Amateur TCL as the Amateur Radio Wireless Telegraphy Licence Conditions Booklet (the "Proposed Amateur Conditions Booklet").

# We are proposing minor changes to the licence template to simplify and ensure consistency with CEPT Recommendation T/R 61-01

- 6.8 We are proposing a number of amendments to the licence template to ensure it is clear, focused on the key elements required and consistent with CEPT Recommendation T/R 61-01.<sup>43</sup> These proposed changes do not change the substance of the relevant term or condition and would not impose any new restrictions on current operational radio use nor affect the existing rights and obligations of licensees.
- 6.9 Specifically, we propose to:
  - add:
    - a new type of licence field to show what type of full licence it is e.g. Full (Club);
  - amend:
    - the Issue date field to confirm that it applies to this version of the licence;
    - the text relating to the issuing of the licence by Ofcom with standard format used in other licences that we issue;
    - the CEPT Recommendation T/R 61-01 text to make it simpler to understand;
    - the reference to the Amateur TCL to instead refer to the Proposed Amateur Conditions Booklet;
  - remove:
    - the CEPT equivalent licence class field as not required by T/R 61-01;
    - the additional address field relating to the mailing address (but keep the main station address);
    - first issue date field.

<sup>&</sup>lt;sup>43</sup> 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.

# **Overview of proposed licence condition changes in the Amateur Conditions Booklet**

- 6.10 In this section we outline the proposed licence condition changes for the Proposed Amateur Conditions Booklet. A copy of the Proposed Licence with the Proposed Amateur Conditions Booklet is provided in Annex 2. Where we have proposed changes to existing provisions, these have been highlighted; green for new conditions that align with standard provisions in Ofcom licences and yellow for new provisions. Text that is not highlighted was already included in the existing Amateur TLC. Due to the complete restructuring of the documents, it is not possible to provide a detailed tracked version.
- 6.11 We are proposing to align the format of the Amateur Conditions Booklet with the <u>Wireless</u> <u>Telegraphy Licence Conditions Booklet</u>, where possible.<sup>44</sup> Most of the conditions are already in the existing amateur radio licence in one form or another. However, there will be some new provisions which are not. Our aim is to standardise the licence conditions across all the licence products that Ofcom issues. This should provide consistency in the way that all licensees interpret their licence making it easier to understand. Where differences arise in the format and the wording of the current condition, we propose to use Ofcom's standard text going forward unless it would result in an unintended consequence to the hobby.
- 6.12 Unlike other licences that Ofcom issues, the Amateur TCL also includes additional notes in the licence to further clarify provisions in the licence or set out standard amateur operating practices. We are proposing to remove these as the proposed new drafting of the Proposed Amateur Conditions Booklet should mean these are no longer required. Where we believe there may be some benefit in providing any further guidance this will be set out in the accompanying amateur radio guidance document that we would publish alongside the updated licence template. As part of the review we will also be revising this document to reflect any policy decisions and make it easier to understand for licensees.
- 6.13 These provisions have been drafted in a way that implements the proposed policy. In the event that we do not proceed with our policy proposal on a given issue we would aim to match the substance of the existing licence condition as closely as possible in the new updated licence, with wording changes where appropriate to simplify and align with standard provisions.

<sup>&</sup>lt;sup>44</sup> 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.

# Proposed condition 1: Licence term, variation and revocation

- 6.14 The majority of the provisions will remain the same as in Clause 4 of the existing Amateur TCL. In some cases, we have made some minor modification to the existing wording.
- 6.15 To implement our proposals for licensees to hold only a single personal amateur radio licence, as set out in paragraphs 3.19 to 3.26 we need to amend the revocation provisions in the licence. The new proposed revocation provision would give Ofcom grounds to revoke a licence if a licensee holds multiple personal<sup>45</sup> licences. This provision would apply to existing licensees and those that progress up the licence levels.

# **Proposed condition 2: Changes**

6.16 We propose to align this with our standard terms and conditions. These were already included in the licence under Clause 6. We have however removed the provisions regarding the revalidation of the licence and a simplified version of this is now in Condition 1 of the Proposed Amateur Conditions Booklet.

# **Condition 3: Licence fee**

- 6.17 We have included the standard Ofcom condition regarding the payment of fees, where they apply.
- 6.18 Currently, the amateur radio licence is free to all those that apply online. Licensees under the age of 75 that apply other than via the Ofcom licensing portal are charged an administration fee of £20. We are not considering changes to this policy as part of this review.

# **Proposed condition 4: Geographical boundaries**

6.19 This new provision partly replaces the text contained in Clause 2 regarding location. The licence continues to apply to the United Kingdom and Crown Dependencies, including the territorial seas. However, we have proposed to simplify the provision, so it only deals with the territorial extent of the licence. Provisions relating to the use of certain modifiers in a call sign have been moved to Condition 6 of the Proposed Amateur Conditions Booklet.

#### We propose to remove the text around maritime mobile activity in UK territorial waters

- 6.20 The main proposed change relates to the removal of the reference that only Full Licence can operate from a Maritime Mobile ('/MM') location. Radio amateurs use the suffix '/MM' when operating on a ship on the seaward side of the low water mark.
- 6.21 As all licensees are able to operate on a ship anywhere in territorial seas, we believe the reference to where a licensee can use the '/MM' suffix to be confusing. We therefore propose to make clear that the holder of any amateur radio licence be permitted to

<sup>&</sup>lt;sup>45</sup> Excludes Full (Club) Licence

operate throughout the United Kingdom, Channel Islands and the Isle of Man including each of their territorial seas.

6.22 We further propose to clarify that only the holder of a Full Licence (but not a Club or a Temporary Reciprocal Licence) be permitted to operate beyond the extent of UK territorial seas, including on a ship (at the absolute discretion of the captain). Operation in the territorial seas of any other country remains subject to authorisation by that country.

# **Proposed condition 5: Coordination (new)**

- 6.23 In a number of licences that Ofcom issues we include a provision relating to the notification of coordination procedures that a licensee must comply with, such as procedures to manage interference at borders between countries.
- 6.24 In many frequency bands the amateur radio licence is already subject to sharing conditions, for example requirements to not interfere with Ministry of Defence (MOD) spectrum use. These are captured in the licence and in our Frequency sharing arrangements between civil and military services document.
- 6.25 We are proposing to include a new licence condition to allow Ofcom the ability to amend these coordination requirements through a notification process, enabling a swift process for updating this document and notifying licensees when coordination conditions change.

# **Proposed condition 6: Radio Equipment Use**

6.26 The majority of the changes we are proposing in this consultation document would be incorporated via the provisions set out below.

#### Purpose

6.27 We have kept the text regarding the purpose of the licence as largely the same, for example that the radio equipment should only be used for the purposes of self-training and is a non-commercial activity. However, we propose to move Clause 1(2) regarding the ability of a member of a user service (e.g., police or fire) to use the equipment into the provisions regarding who may operate the radio equipment.

#### Persons who may operate the radio

- 6.28 As set out in paragraphs 3.27 to 3.36, we have proposed to relax the provisions regarding who may operate the equipment for Full and Full (Club) licensees. This would simplify the current drafting and would allow anyone who is under the direct supervision of the licensee to use the equipment.
- 6.29 This provision will continue allow use of the radio equipment by Category 1 and 2 responders as listed in Schedule 1 of the Civil Contingencies Act 2004. This was set out by the old Clause 1(2).
- 6.30 Finally, we are proposing to include a new provision that makes it clear that the licensee is responsible for the operation of the radio equipment at all times. It is up to the licensee to

ensure that anyone using the equipment must be aware of and comply with the provisions in the licence.

#### Remote control, unattended use, radio beacons, gateway and repeater use

6.31 The current rules on remote and unattended operation are set out in Clause 10 of the current licence. These allow the licensee to use operate their equipment remotely and unattended. However, the nature and number of enquiries that we receive make plain that the way in which Clause 10 provisions are drafted are not clear and can be confusing. For this reason, we wish to clarify the relevant licence terms. Section 4 sets out the detailed proposals.

#### We propose to amend the definition of remote control operation

- 6.32 As set out in paragraphs 5.9 and 5.10, we are proposing to simplify the provisions around remote control operation. In addition to these changes we are also amending the definition of this use in the licence.
- 6.33 It is defined in the current licence as:

"Remote Control Operation means Unattended Operation but where the Radio Equipment is operated by remote control, that is, where the Licensee has the ability to control the Radio Equipment from a different location to that where the Radio Equipment is located".

6.34 We are proposing to simplify this definition to:

"Remote Control Operation means the Radio Equipment transmits at a different location from where the Licensee but is at all times under their direct control via a remote-control link."

6.35 This new definition does not permit the use of the radio equipment by anyone other than the licensee and does not permit general unsupervised use.

#### We propose to clarify the meaning of "unattended operation" in the licence

6.36 This is similar to remote control operation, but the licensee does not need to be controlling the equipment at all times. In the current licence, unattended operation is defined as:

"Unattended Operation means the operation of Radio Equipment by the Licensee when the Licensee is in a different location to that where the Radio Equipment is located".

6.37 We are proposing to clarify the difference between "Unattended operation" and "remote control" by introducing a new definition for unattended operation:

"Unattended operation means the Radio Equipment transmits at a different location from the Licensee, while not being under their direct control." 6.38 This new definition still would not permit the use of the radio equipment by anyone other than the licensee and would not permit general unsupervised use.

#### Provisions relating to the use of beacons, gateways and repeaters

- 6.39 Whilst replacing the existing Clause 10 of the licence we are also proposing to incorporate some NoVs that Ofcom issues into the standard licence conditions to allow the operation of beacons, repeaters and gateways. These proposals are set out in paragraphs 5.11 to 5.36 of this document.
- 6.40 The proposed licence conditions cover the technical restrictions on using the equipment, obligations placed on the licensee when using the equipment and what licence levels can deploy the equipment.

#### **Making transmissions**

- 6.41 Clause 11 of the existing Amateur TLC sets out the details about what messages may be sent. We are proposing some minor amendments to these provisions to simplify them.
- 6.42 We propose to remove the current text set out in clause 11(1) that permits licensees:

"to discuss any topics of mutual interest with other Amateurs, and to seek to receive and impart any information and any ideas".

- 6.43 We propose to remove this as it is unclear what the provision is intended to enforce. We note that the footnote referenced note (g). However, we believe that the reference should have been to note (h), which in turn referred to the Wireless Telegraphy (Content of Transmission) Regulations 1988. These 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. This provision applies to all transmissions that occur and it is therefore not necessary to specify this within the licence.
- 6.44 We propose to amend the provision relating to encryption currently provided for in Clause 11(2) of the Amateur TLC. This would align the text with the Radio Regulations<sup>46</sup>, allowing encryption for control signals exchanged between earth command stations and space stations in the amateur-satellite service. The licence already allows encryption in exceptional circumstances, when a radio amateur is supporting a responder and to assist with communications in times of disaster or national or international emergency. In all other circumstances, transmissions between amateur stations must remain unencrypted.
- 6.45 We are proposing to remove Clause 11(4)(c) relating to the sending of general reception messages from mailbox or bulletin board as we understand that this relates to out-of-date technologies.

<sup>&</sup>lt;sup>46</sup> Radio Regulation 25.2A provides: "Transmissions between amateur stations of different countries shall not be encoded for the purpose of obscuring their meaning, except for control signals exchanged between earth command stations and space stations in the amateur-satellite service"

6.46 The proposed 'making transmissions' provisions (sections 18 and 19 of Condition 6 of the draft licence terms and conditions) do not include text from clause 14, as we understand that this is no longer required as these provisions related to the recording and retransmitting of messages the licensee received from other amateurs.

#### Identification

- 6.47 Clause 13 of the existing Amateur TLC sets out the rules for identifying the station when transmitting. In the Proposed Amateur Conditions Booklet, we have kept these provisions largely the same. We have however moved the text relating to the use of a Regional Secondary Locator ('RSL') in Clause 2 into this section.
- 6.48 As set out in paragraphs 4.15 to 4.20, we are proposing an amendment to the existing provision to make the use of the RSL an optional and not mandatory requirement when transmitting the call sign. However, for holders of an Intermediate Licence with a call sign starting with a 2, the use of an RSL is still mandatory.
- 6.49 We are proposing to add a provision to allow the use of a special RSL to mark a national event without the need to obtain an individual NoV from Ofcom.
- 6.50 Finally, as we discussed in paragraphs 4.30 to 4.32, we are proposing to make it clear that licensees may use any prefix after their call sign providing it is indicated with a "/".

## **Condition 7: Access and Inspection**

6.51 In accordance with our standard spectrum licence conditions, all licences will continue to include the condition giving Ofcom the power to access and inspect the licensee's radio equipment. This is so we can check the licensee's compliance with the terms of its licence, if necessary. This is an existing provision, and we are not proposing any changes.

## **Proposed condition 8: Modification, Restriction and Closedown**

- 6.52 The amateur radio licence would continue to include a condition that gives Ofcom the power to require the licensee to modify, restrict or close down the use of its radio equipment, should we have reasonable grounds to believe that the licensee has breached the terms of its licence, or we consider this necessary in the event of a national or local state of emergency being declared.
- 6.53 We have moved the existing provision set out in clause 12 of the Amateur TLC about keeping a log of interference to this section. However, we have omitted existing Clause 12(2) (which requires the Licensee to maintain a log, when operating on a ship), as we do not believe that it is needed to support our management of the spectrum.
- 6.54 We have proposed a slight amendment to Clause 5(3) relating to where others can require the licensee to cease operating. The current wording allows a vessel's master to require that transmissions are stopped but only when used in a Maritime Mobile location. We note that there could be other instances, such as on large tidal rivers and lakes, where the vessels master may wish to limit transmissions. Therefore, we are proposing that the

captain (or the person in charge of the ship at that time) can require the licensee to cease transmitting irrespective of location.

- 6.55 In addition, if we introduce our proposals to allow low power airborne use of some amateur radio frequencies, we believe that similar powers should also be granted to the captain of the aircraft. We have therefore proposed to expand the current provision to also cover aircraft.
- 6.56 We have proposed that before operating on a ship or aircraft that the licensee may only operate the equipment with the agreement of the captain or the person in charge at that time.

# **Condition 9: Electromagnetic Fields (EMF) Compliance**

6.57 We are not proposing any changes to this condition.

# **Proposed condition 10: Interpretation**

6.58 We have made a small number of amendments to this section. In most areas the definition of terms used in the existing Amateur TLC remains the same. We have removed some references that are not or no longer used in the licence. Where policy proposals result in a change of a definition, we have highlighted these in the document.

**Question 16:** Do you agree to Ofcom's proposed changes in licence format and the alignment of standard terms and conditions? Do you have any other comments on this proposal?

**Question 17:** Do you agree to Ofcom's proposed changes to the licence terms and conditions? Do you have any other comments on this proposal?

# 7. Summary of proposals and next steps

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

- 7.1 In line with our statutory duties and our responsibility to ensure the optimal use of the radio spectrum, we are proposing to make changes to the amateur radio licence and some of our associated policies.
- 7.2 We consider the proposals set out in this consultation to be:
  - **objectively justified** in that they are designed to strike the right balance between maintaining appropriate regulatory control over spectrum use and licensing, and clearer and more streamlined, consistent and responsive regime for radio amateurs;
  - **not unduly discriminatory** against particular persons or against a particular description of persons in that they apply to all potential new and existing amateur radio licensees;
  - proportionate to what they are intended to achieve, in that our proposed 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; and
  - **transparent** in relation to what they are intended to achieve, in that they are clearly described and explained in this consultation document.

# Impact assessment

- 7.3 Impact assessments provide a valuable way of assessing different options for regulation.
   They form part of best practice policy making. This document as a whole represents an impact assessment as defined in section 7 of the Communications Act 2003.<sup>47</sup>
- 7.4 We provisionally consider that our proposed changes set out in this document are unlikely to have a significant effect on licensees in accordance with section 7 of the Communications Act 2003. However, the proposals will liberalise their licences to allow greater operating freedom, provide clarity and remove unnecessary administrative burdens on licensees.
- 7.5 In preparing this document, we have 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 these proposals have any significant impact on businesses or the general public. Nor do we believe that these proposals disproportionately impact on people on low incomes or those living in different areas of

<sup>&</sup>lt;sup>47</sup> For further information about our approach to impact assessments, see the guidelines <u>'Better policy making:</u> <u>Ofcom's approach to impact assessments'</u> on our website.

the UK (including in rural or urban areas) in accordance with section 3(4)(i) and 3(4)(l) of the Communications Act 2003.

- 7.6 We have also considered the impact of granting the proposed licence on other users of the radio spectrum and do not believe there are likely to be any negative impacts from our proposals on other authorised spectrum users.
- 7.7 The policy proposals set out in this document seek to relax a number of restrictions currently 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 proposed changes to the spectrum authorisation rules for amateurs are a move away from existing 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 would be able to continue to use an RSL as part of their call sign if they wish to do so.
- 7.8 While we are proposing to change the structure and some of the wording in licences, 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 current licences 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 proposals are intended to simplify the format of the licensing documentation for licensees.
- 7.9 We do not expect any of the proposed new terms and conditions to require licensees to take any additional steps to ensure they comply with them. If licensees are complying with all the current 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.
- 7.10 Any comments about our assessment of the impact of our proposals should be sent to us by the closing date for this consultation. We will consider all comments before deciding whether to implement our proposals.

# **Equality Impact Assessment**

- 7.11 Ofcom is separately required by statute to assess the potential impact of all our functions, policies, projects and practices on the following equality groups: age, disability, gender, gender reassignment, pregnancy and maternity, race, religion or belief, and sexual orientation.
- 7.12 Equality impact assessments also assist us in making sure that we are meeting our principal duty of furthering the interests of citizens and consumers regardless of their background or identity.
- 7.13 After carrying out an initial assessment we do not consider that our proposals have any equality detrimental implications under the Equality Act 2010. 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 proposals would have negative impacts on any groups sharing protected characteristics. We note that some proposals involve the use of online systems to carry out such tasks however, as with current practice, <u>alternative</u> <u>accessibility arrangements</u> would be in place to enable all stakeholders to benefit from these proposals.

- 7.14 We have not carried out separate equality impact assessments in relation to the additional equality groups in Northern Ireland: religious belief, political opinion and dependents. This is because we anticipate that our proposals would not have a differential impact in Northern Ireland compared to consumers in general.
- 7.15 We welcome any stakeholder views on this assessment.

# **Next steps**

7.16 We invite responses to this consultation by **5pm on 4 September 2023**. Following a review of all responses received, we plan to publish a policy statement by the end of 2023 that sets out our decisions on whether to proceed with the proposed policy and licence changes we have outlined in this document.

# Proposed phased approach to implementation

- 7.17 If we decide to proceed with our proposals we would need to phase in the introduction of some of the proposals set out in this document, reflecting complexities and system requirements. Accordingly, we envisage that our proposed changes would fall into three phases of implementation:
  - a) Phase 1: changes which can be implemented through changes to the amateur radio;
  - b) Phase 2: changes requiring minor modification to the current licensing platform or other specific action from Ofcom (but not the new licensing platform); and
  - c) Phase 3: changes requiring the new licensing platform to be in place.
- 7.18 We have indicated which phase each of our proposed changes would fall under in Figure 4.
   These provisional plans may be subject to change. We will provide further updates on implementation timelines in our policy statement later this year, and as needed thereafter.

#### Figure 4: Implementation phasing of the proposed changes

Phase 1 (Licence variation required) - later in financial year 2023/23	Phase 2 (Licensing platform modification or other Ofcom action required) - we would aim for 2024	Phase 3 (new licensing platform required) – we would aim for later in the 2024/25 financial year
Allow third-party supervised operation. RSL use optional and allow wider use of 'E' for England.	New Intermediate M8 and M9 call sign prefix. Restriction on the number of call signs.	Improvements to the online revalidation process.

Phase 1 (Licence variation required) - later in financial year 2023/23	Phase 2 (Licensing platform modification or other Ofcom action required) - we would aim for 2024	Phase 3 (new licensing platform required) – we would aim for later in the 2024/25 financial year
Special RSL notification. Call sign suffix provisions. Increased transmit power. Foundation and Intermediate use of the internet for remote control links. Incorporating beacon, gateway and repeater NoVs into the licence. Allowing Foundation licensees to self-build, access 2.4 GHz and 5 GHz bands. Permit low power airborne use. Update and alignment of the licence terms and conditions.	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.

## Licence variation and revocation process

- 7.19 If we decide to proceed with any changes that requires the amateur radio licence to be varied, we must follow the process as set out in the WT Act. Depending on the response to this consultation we would expect any licence variation process to start shortly after the publication of our statement.
- 7.20 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 our proposal on our website. Where we publish a proposal on our website, it is called a General Notice.
- 7.21 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.
- 7.22 As we advised in the emails and letters we sent out when varying licences to include the EMF schedule, Ofcom intends to make greater use of General Notices in the future and will not always individually notify licensees. We expect that if we proceed with making any of the proposed changes to the licence we will notify these changes via a General Notice on published our website.

- 7.23 Once the deadline for providing a representation has passed, Ofcom will consider all the representations that have been provided. We must then decide whether to go ahead with our proposal. We may decide to vary licences in accordance with our proposal or with some modifications to our proposal.
- 7.24 We must make our final decision within one month of the deadline for providing a representation. We must let affected licensees know what we have decided and explain the reasons for our decision. We can do this either by individually contacting affected licensees or by publishing our final decision on our website (which is again called a General Notice). We would subsequently send licensees their new licence document via their preferred communication method.

#### Other implementation changes we would make

- 7.25 If we decide to proceed with the proposals set out in this document, we will need to make a number of other changes beyond amending amateur radio licences. These are set out in more detail below.
- 7.26 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 would enable further benefits.

#### **Document updates**

7.27 As part of the policy implementation process, we would 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 examinations and syllabus

7.28 We would liaise 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 conditions.

#### **Statutory Instrument for visiting amateurs**

- 7.29 We propose to update <u>the Wireless Telegraphy (Reciprocal Exemption of European Radio</u> <u>Amateurs) Regulations 1988</u>. 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.
- 7.30 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.

7.31 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.

# How to stay up to date

7.32 We encourage all licensees to <u>subscribe to email spectrum updates</u> to stay up to date with our proposal, decision, and any future changes.

# 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</u> <u>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.
- A1.1 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.
- A1.4 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.
- A1.2 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.
- A1.3 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**

- A1.5 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.<sup>48</sup>
- A1.6 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**

- A1.7 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));<sup>49</sup> 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)).
- A1.8 Section 9(4) of the WT Act sets out a non-exhaustive list of the terms, provisions and limitations that Ofcom may impose.
- A1.9 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)).

<sup>&</sup>lt;sup>48</sup> Section 8 of the WT Act.

<sup>&</sup>lt;sup>49</sup> See Ofcom's <u>General Conditions of Entitlement</u>.

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

- A1.10 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 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.<sup>50</sup>
- A1.11 Schedules 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.
- A1.12 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.
- A1.13 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).

<sup>&</sup>lt;sup>50</sup> 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. Proposed Amateur Licence and Conditions Booklet

- A1.14 The following text contains the proposed changes to the amateur radio licence and its terms and conditions.
- A1.15 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.
- A1.16 We have however illustrated in the document any proposed changes to the wording:
  - New text based on existing standard terms and conditions set out in other Ofcom Wireless Telegraphy Act 2006 licences – this is <u>highlighted green and underlined</u>.
  - Proposed new text to implement the proposed policy changes or amend existing text this is highlighted yellow and in bold.
- A1.17 Where the text is not highlighted, this indicates that the provisions were already in the existing licence and its terms and conditions.
- A1.18 The existing <u>amateur radio licence terms and conditions</u> 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	
<mark>Mailing address</mark>	
<mark>Adresse postale</mark>	
Postanschrift	
Main Station Address	
Adresse de station principale	
Hauptstationsanschrift	
Issue date <mark>of this</mark>	
version	
Date de délivrance	
Ausstellungsdatum	

<mark>First issue date</mark>	
<mark>Première date de délivrance</mark>	
Erstausstellungsdatum	
Licence number	
Numéro de licence	
Lizenznummer	

- <u>This Licence is issued by the Office of Communications ("Ofcom") and replaces any</u> previous authority granted in respect of the service subject to this Licence by Ofcom or by the Secretary of State.
- 2. This Licence authorises [Licensee name] ("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 OfW xxx]
- 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.

# **Amateur Radio General Licence Conditions Booklet**

# **Condition 1 - Licence Term, Variation and Revocation**

- 1. <u>The Licence shall continue in force until revoked by Ofcom, surrendered by the Licensee</u> or until the Licensee is granted an Amateur Radio Licence at a higher class.
- 2. <u>Pursuant to schedule 1 paragraph 8 of the Wireless Telegraphy Act 2006 ("the Act")</u> <u>Ofcom may not revoke this Licence under schedule 1 paragraph 6 except:</u>
  - a) at the request of, or with the consent of, the Licensee;
  - a) if there has been a breach of any of the conditions of the Licence;
  - b) in accordance with schedule 1 paragraph 8(5) of the Act;
  - c) 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
  - d) 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.
  - e) Where the licensee holds more than one personal Amateur Radio licence of any class (or class);
  - 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;
  - g) If the Licence is a Full (Club) Licence and the Licensee no longer represents the club named above; or
  - h) 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.<sup>51</sup>

# **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.

<sup>&</sup>lt;sup>51</sup> https://www.ofcom.org.uk/

# **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
  - i) 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 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. <u>The Licensee shall ensure that the Radio Equipment is operated in compliance with such</u> <u>coordination procedures as may be notified to the Licensee by Ofcom.</u>

# **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.
- 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;
  - j) as a leisure activity and not for commercial purposes of any kind; or
  - k) to assist with communications in times of disaster or national or international emergency.

#### Persons who may operate the radio equipment

- 5. 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.
- 6. 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.
- 7. The Radio Equipment may be used by a Category 1 or 2 Responder ('Responder') during any operation or exercise conducted by a Responder.
- 8. When the Radio Equipment is used by a person other than the Licensee, the Licensee:
  - a) <u>must ensure all users are made aware of and comply with the terms, conditions and</u> 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**

- 9. 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;
  - e) transmissions from the Radio Equipment can be terminated immediately; and
  - f) 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

- 10. The Licensee must ensure that, when deploying Radio Equipment for Unattended Operation:
  - 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 № (as specified above) is displayed on or next to any unattended Radio Equipment located other than at the main station address.

## Radio beacon operation

- 11. 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;
  - b) is able to close down the Radio Beacon Station within two hours of being required to do so by Ofcom;
  - c) transmits at powers no greater than 5 Watts ERP; and
  - 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.
- 12. 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 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**

- 13. 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) is able to close down the Gateway within two hours of being required to do so by Ofcom.
  - takes all reasonable steps to ensure that the Gateway is only used by an Amateur; and
  - remains responsible for the operation of the Gateway and compliance with the terms, conditions and limitations of the Licence.

## **Repeater operation**

- 14. 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) Ensures that the Repeater 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 Repeater 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 Repeater is only used by an Amateur;
- remains responsible for the operation of the Repeater and compliance with the terms, conditions and limitations of the Licence; and
- e) is able to close down the Repeater within two hours of being required to do so by Ofcom.
- 15. 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 ERP, providing that the Licensee:
  - a) 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; and
  - b) 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.
  - c) takes all reasonable steps to ensure that the Repeater is only used by an Amateur;
  - remains responsible for the operation of the Repeater and compliance with the terms, conditions and limitations of the Licence; and
  - e) is able to close down the Repeater within two hours of being required to do so by Ofcom.

#### **Making transmissions**

- 16. Unless the Radio Equipment is being used to support a Responder, the Licensee must ensure that:
  - a) Transmissions are addressed to one or more amateur radio station(s);
  - b) Transmissions between amateur stations are not encoded for the purpose of obscuring their meaning, except for control signals exchanged between earth command stations and space stations in the amateur-satellite service.
- 17. 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.

# Identification

- 18. 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.
- 19. 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.
- 20. 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.

Region	All licences	Full (Club) Licence only
England	E	X
Guernsey	U	Р
Isle of Man	D	Т
Jersey	J	Н
Northern Ireland	I	Ν
Scotland	М	S

21. Where an RSL is used, it must be one of the following:

- 22. 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.
- 23. 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) <u>to have access to the Radio Equipment; and</u>
  - 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**

- 1. 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.
- 3. 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

 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 restrictions<sup>52</sup> in the relevant tables for general public exposure identified in the ICNIRP Guidelines<sup>53</sup> in any area where a member of the general public is or can be expected to be present when transmissions are taking place.

#### 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:
  - c) the total electromagnetic field exposure levels produced by the Licensee's On-Site Radio Equipment, together with
  - d) 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,

<sup>&</sup>lt;sup>52</sup> Compliance with the reference levels for general public exposure identified in the ICNIRP Guidelines will ensure compliance with the basic restrictions.

<sup>&</sup>lt;sup>53</sup> The relevant tables for general public exposure are identified in Ofcom's "<u>Guidance on EMF Compliance and</u> <u>Enforcement</u>".

do not exceed the basic restrictions<sup>54</sup> in the relevant tables for general public exposure identified in the ICNIRP Guidelines<sup>55</sup> in any area where a member of the general public is or can be expected to be present when transmissions are taking place.

#### **Emergency dituations**

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.<sup>56</sup>

#### 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 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.
  - d) "Call sign" means the unique group of alphanumeric characters, specified in this licence and used to identify the Radio Equipment.

<sup>&</sup>lt;sup>54</sup> Compliance with the reference levels for general public exposure identified in the ICNIRP Guidelines will ensure compliance with the basic restrictions.

<sup>&</sup>lt;sup>55</sup> The relevant tables for general public exposure are identified in Ofcom's "<u>Guidance on EMF Compliance and</u> <u>Enforcement</u>".

<sup>&</sup>lt;sup>56</sup> Further information on emergency situations is set out in Ofcom's "<u>Guidance on EMF Compliance and Enforcement</u>".

- e) "CEPT Recommendation T/R 61-01" means the European Conference of Postal and Telecommunications Administrations (CEPT) recommendation on CEPT Radio Amateur Licence.
- 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.
- "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.
- "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.
- 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.<sup>57</sup>
- 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.

<sup>&</sup>lt;sup>57</sup> 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): <u>The Control of Electromagnetic Fields at Work Regulations 2016</u>, <u>The Control of Electromagnetic Fields at Work Regulations (Northern Ireland) 2016</u> and <u>The Merchant Shipping and Fishing Vessels (Health and Safety at Work)</u> (Electromagnetic Fields) Regulations 2016.

- p) "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.<sup>58</sup>
- q) "Inspect" includes examine and test.
- r) "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.
- s) "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.<sup>59</sup>
- t) **"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.
- u) "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.
- v) "Radio Beacon" means automatic transmitting-only Radio Equipment which is operated by the Licensee for the purposes of the purpose of determining radio propagation characteristics; position reporting; direction finding or other telemetry.
- w) "Radio Equipment" means the radio equipment specified in the Licence.
- "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.

<sup>&</sup>lt;sup>58</sup> 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:

<sup>&</sup>lt;u>https://www.icnirp.org/cms/upload/publications/ICNIRPemfgdl.pdf</u> ("1998 Guidelines") <u>or</u> 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: <u>https://www.icnirp.org/cms/upload/publications/ICNIRPrfgdl2020.pdf</u>

<sup>(&</sup>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.

<sup>&</sup>lt;sup>59</sup> 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*".

- y) "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.
- z) "Repeater" means Radio Equipment that is capable of simultaneous reception and re-transmission on different frequencies.
- aa) "Responder" means a Category 1 or 2 Responder as listed in Schedule 1 of the Civil Contingencies Act 2004.
- bb) "**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.
- cc) "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.
- dd) **"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 direction<sup>60</sup> that is higher than 100 Watts EIRP or 61 Watts ERP.<sup>61</sup>
  - 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.<sup>62</sup>
  - 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.
- ee) "Site" means a physical structure, building, vehicle or moving platform.
- ff) "Ship" has the same meaning as given in section 313 of the Merchant Shipping Act 1995.
- gg) "the Act" means the Wireless Telegraphy Act 2006.

<sup>&</sup>lt;sup>60</sup> 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.

<sup>&</sup>lt;sup>61</sup> 100 Watts EIRP is equivalent to 61 Watts ERP.

<sup>&</sup>lt;sup>62</sup> The relevant tables for general public exposure are identified in Ofcom's "Guidance on EMF Compliance and Enforcement".

hh) "Unattended Operation" means the use of Radio Equipment by a person in a different location from that of the Radio Equipment.

- ii) "Undue Interference" has the meaning given by Section 115 of the Act.
- jj) "Wireless telegraphy apparatus" has the meaning given to it in section 117 of the Act.
- kk) "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.

### 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) ISM is an abbreviation for industrial, scientific and medical applications.
- c) 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:
    - (a) The Licensee shall transmit the station Callsign when he first joins the net and on leaving it;
    - (b) subject to sub-clause (c) below, whilst participating in the net, the Licensee shall not be required to transmit the station Callsign when making contact with other participants;

- (c) 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.

**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) e.r.p.
1810 to 1830 kHz	Primary. Available on the basis of non-interference to other services outside the UK or Crown Dependencies.	Not allocated	20W (13 dBW) <del>-10W</del> <del>(10 dBW)</del> 500 mW EIRP airborne
1830 to 1850 kHz	Primary	Not allocated	20W (13 dBW) <del>-10W</del> <del>(10 dBW)</del> 500 mW EIRP airborne
1850 to 2000 kHz	Secondary. Available on the basis of non-interference to other services.	Not allocated	20W (13 dBW) <del>-10W</del> <del>(10 dBW)</del>
3500 to 3800 kHz	Primary. Shared with other Services.	Not allocated	20W (13 dBW)- <del>10W</del> <del>(10 dBW)</del> 500 mW EIRP airborne
7000 to 7100 kHz	Primary	Primary	20W (13 dBW)- <del>10W</del> <del>(10 dBW)</del> 500 mW EIRP airborne
7100 to 7200 kHz	Primary	Not allocated	20W (13 dBW)- <del>10W</del> <del>(10 dBW)</del> 500 mW EIRP airborne
10000 to 10150 kHz	Secondary	Not allocated	20W (13 dBW)- <del>10W</del>

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)
14000 to 14250 kHz	Primary	Primary	( <del>10 dBW)</del> 20W (13 dBW) <del>-10W</del> <del>(10 dBW)</del> 500 mW EIRP airborne
14250 to 14350 kHz	Primary	Not allocated	20W (13 dBW) <del>-10W</del> <del>(10 dBW)</del> 500 mW EIRP airborne
18068 to 18168 kHz	Primary	Primary	20W (13 dBW) <del>-10W</del> <del>(10 dBW)</del> 500 mW EIRP airborne
21000 to 21450 kHz	Primary	Primary	20W (13 dBW) <del>-10W</del> <del>(10 dBW)</del> 500 mW EIRP airborne
24890 to 24990 kHz	Primary	Primary	20W (13 dBW) <del>-10W</del> <del>(10 dBW)</del> 500 mW EIRP airborne
28.0 to 29.7 MHz	Primary	Primary	20W (13 dBW) <del>-10W</del> <del>(10 dBW)</del> 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	20W (13 dBW) <del>-10W</del> <del>(10 dBW)</del> 500 mW EIRP airborne
51 to 52 MHz	Secondary. Available on the basis of non-interference to other services.	Not allocated	20W (13 dBW) <del>-10W</del> <del>(10 dBW)</del>
70.0 to 70.5 MHz	Secondary. Available on the basis of non-interference to other services.	Not allocated	20W (13 dBW) <del>-10W</del> <del>(10 dBW)</del>
144 to 146 MHz	Primary	Primary	20W (13 dBW) <del>-10W</del> <del>(10 dBW)</del> 500 mW EIRP airborne
430 to 431 MHz	Secondary	Not allocated	20W (13 dBW)- <del>10W</del> <del>(10 dBW)</del>
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	20W (13 dBW) <del>-10W</del> <del>(10 dBW)</del>

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)
432 to 435 MHz	Secondary	Not allocated	20W (13 dBW) <del>-10W</del> <del>(10 dBW)</del>
435 to 438 MHz	Secondary	Secondary	20W (13 dBW) <del>-10W</del> <del>(10 dBW)</del>
438 to 440 MHz	Secondary	Not allocated	20W (13 dBW) <del>-10W</del> <del>(10 dBW)</del>
<mark>2400</mark> to <mark>2450</mark> MHz	Secondary. Users must accept interference from ISM users.	Secondary. Users must accept interference from ISM users.	<mark>1W (0 dBW)</mark>
<mark>5650</mark> to <mark>5670</mark> MHz	Secondary	Secondary. Earth to space only	<mark>1W (0 dBW)</mark>
<mark>5670</mark> to <mark>5680</mark> MHz	Secondary	Not allocated	<mark>1W (0 dBW)</mark>
<mark>5755</mark> to <mark>5765</mark> MHz	Secondary. Users must accept interference from ISM users.	Not allocated	<mark>1W (0 dBW)</mark>
<mark>5820</mark> to <mark>5830</mark> MHz	Secondary. Users must accept interference from ISM users.	Not allocated	<mark>1W (0 dBW)</mark>
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 L	icence 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) e.r.p.
1810 to 1830 kHz	Primary. Available on the basis of non-interference to other services outside the UK or Crown Dependencies.	Not allocated	100W (20 dBW) <del>50W</del> <del>(17 dBW)</del> 500 mW EIRP airborne
1830 to 1850 kHz	Primary	Not allocated	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del> 500 mW EIRP airborne
1850 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	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del> 500 mW EIRP airborne
7000 to 7100 kHz	Primary	Primary	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del> 500 mW EIRP airborne
7100 to 7200 kHz	Primary	Not allocated	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del> 500 mW EIRP airborne
10000 to 10150 kHz	Secondary	Not allocated	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del>
14000 to 14250 kHz	Primary	Primary	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del> 500 mW EIRP airborne
14250 to 14350 kHz	Primary	Not allocated	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del> 500 mW EIRP airborne
18068 to 18168 kHz	Primary	Primary	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del> 500 mW EIRP airborne
21000 to 21450 kHz	Primary	Primary	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del> 500 mW EIRP airborne
24890 to 24990 kHz	Primary	Primary	<mark>100W (20 dBW)<del>-50W</del> <del>(17 dBW)</del> 500 mW EIRP airborne</mark>
28.0 to 29.7 MHz	Primary	Primary	<mark>100W (20 dBW)<del>-50W</del> <del>(17 dBW)</del></mark>

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
50 to 51 MHz	Primary. Available on the basis of non-interference to other services outside the UK or Crown Dependencies.	Not allocated	<mark>100W (20 dBW)<del>-50W</del> <del>(17 dBW)</del> 500 mW EIRP airborne</mark>
51 to 52 MHz	Secondary. Available on the basis of non-interference to other services.	Not allocated	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del>
70.0 to 70.5 MHz	Secondary. Available on the basis of non-interference to other services.	Not allocated	100W (20 dBW)- <del>50W</del> <del>(17 dBW)</del>
144 to 146 MHz	Primary	Primary	100W (20 dBW)- <del>50W</del> <del>(17 dBW)</del> 500 mW EIRP airborne
430 to 431 MHz	Secondary	Not allocated	40W (16 dBW) e.r.p.
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) e.r.p.
432 to 435 MHz	Secondary	Not allocated	<mark>100W (20 dBW)<del>-50W</del> <del>(17 dBW)</del></mark>
435 to 438 MHz	Secondary	Secondary	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del>
438 to 440 MHz	Secondary	Not allocated	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del>
1240 to 1260 MHz	Secondary	Not allocated	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del>
1260 to 1270 MHz	Secondary	Secondary. Earth to space only	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del>
1270 to 1325 MHz	Secondary	Not allocated	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del>
2310 to 2350 MHz	Secondary. Available on the basis of non-interference to other services.	Not allocated	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del>
2390 to 2400 MHz	Secondary. Available on the basis of non-interference to other services.	Not allocated	100W (20 dBW)- <del>50W</del> <del>(17 dBW)</del>
2400 to 2450 MHz	Secondary. Users must accept interference from ISM users.	Secondary. Users must accept interference from ISM users.	100W (20 dBW)- <del>50W</del> <del>(17 dBW)</del>
3400 to 3410 MHz	Secondary. Available on the basis of non-interference to other services.	Not allocated	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del>
5650 to 5670 MHz	Secondary	Secondary. Earth to space	100W (20 dBW)- <del>50W</del>

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)
		only	<mark>(17 dBW)</mark>
5670 to 5680 MHz	Secondary	Not allocated	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del>
5755 to 5765 MHz	Secondary. Users must accept interference from ISM users.	Not allocated	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del>
5820 to 5830 MHz	Secondary. Users must accept interference from ISM users.	Not allocated	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del>
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) <del>-50W</del> <del>(17 dBW)</del>
10.000 to 10.125 GHz	Secondary	Not allocated	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del>
10.225 to 10.450 GHz	Secondary	Not allocated	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del>
10.450 to 10.475 GHz	Secondary	Secondary	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del>
10.475 to 10.500 GHz	Not allocated	Secondary	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del>
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) <del>-50W</del> <del>(17 dBW)</del> 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)- <del>50W</del> <del>(17 dBW)</del>
24.15 to 24.25 GHz	Secondary	Not allocated	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del>
47.0 to 47.2 GHz	Primary	Primary	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del> 500 mW EIRP airborne
75.500 to 75.875 GHz	Secondary	Secondary	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del>
75.875 to 76.000 GHz	Primary	Primary	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del> 500 mW EIRP airborne
76.0 to 77.5 GHz	Secondary	Secondary	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del>
77.5 to 78.0 GHz	Primary	Primary	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del> 500 mW EIRP airborne
			86

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)
78 to 79 GHz	Secondary	Secondary	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del>
79 to 81 GHz	Secondary	Secondary	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del>
122.25 to 123.00 GHz	Secondary	Not allocated	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del>
134 to 136 GHz	Primary	Primary	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del> 500 mW EIRP airborne
136 to 141 GHz	Secondary	Secondary	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del>
241 to 248 GHz	Secondary	Secondary	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del>
248 to 250 GHz	Primary	Primary	100W (20 dBW) <del>-50W</del> <del>(17 dBW)</del> 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) e.r.p.
472 to 479 kHz	Secondary	Not allocated	5W (7 dBW) e.i.r.p.
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) <del>400W (26 dBW)</del> 500 mW EIRP airborne
1830 to 1850 kHz	Primary	Not allocated	1000W (30 dBW) <del>400W (26 dBW)</del> 500 mW EIRP airborne
185 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	Not allocated	1000W (30 dBW)

Frequency Bands	Status of Amateur Service allocation under this licence Services.	Status of Amateur Satellite Service allocation under this licence	Maximum Peak Envelope Power level in Watts (and dB relative to 1 Watt) 400W (26 dBW) 500 mW EIRP airborne
5.2585 to 5.264 kHz 5.276 to 5.284 kHz 5.2885 to 5.292 kHz 5.298 to 5.307 kHz 5.313 to 5.323 kHz 5.333 to 5.338 kHz 5.354 to 5.358 kHz 5.362 to 5.3745 kHz 5.378 to 5.382 kHz 5.395 to 5.4015 kHz	Secondary. 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) 4 <del>00W (26 dBW)</del> 500 mW EIRP airborne
7100 to 7200 kHz	Primary	Not allocated	1000W (30 dBW) 4 <del>00W (26 dBW)</del> 500 mW EIRP airborne
10.10 to 10.15 MHz	Secondary	Not allocated	400W (26 dBW)
14.00 to 14.25 MHz	Primary	Primary	1000W (30 dBW) 4 <del>00W (26 dBW)</del> 500 mW EIRP airborne
14.25 to 14.35 MHz	Primary	Not allocated	1000W (30 dBW) 4 <del>00W (26 dBW)</del> 500 mW EIRP airborne
18.068 to 18.168 MHz	Primary	Primary	1000W (30 dBW) 4 <del>00W (26 dBW)</del> 500 mW EIRP airborne
21.00 to 21.45 MHz	Primary	Primary	1000W (30 dBW) <del>400W (26 dBW)</del> 500 mW EIRP airborne
24.89 to 24.99 MHz	Primary	Primary	1000W (30 dBW) 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)
			500 mW EIRP airborne
28.0 to 29.7 MHz	Primary	Primary	1000W (30 dBW) <del>400W (26 dBW)</del> 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) <del>400W (26 dBW)</del> 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) 4 <del>00W (26 dBW)</del> 500 mW EIRP airborne
430 to 431 MHz	Secondary	Not allocated	40W (16 dBW) e.r.p.
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) e.r.p.
432 to 435 MHz	Secondary	Not allocated	400W (26 dBW)
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	Not allocated	400W (26 dBW)

Frequency Bands	Status of Amateur Service	Status of Amateur	Maximum Peak
requerrey surface	allocation under this	Satellite Service	Envelope Power
	licence	allocation under this	level in Watts
		licence	(and dB relative
			to 1 Watt)
	other services.		
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) <del>400W (26 dBW)</del>
			<mark>500 mW EIRP</mark> 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)
47.0 to 47.2 GHz	Primary	Primary	1000W (30 dBW) <del>400W (26 dBW)</del> 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)
			<mark>500 mW EIRP</mark> airborne
76.0 to 77.5 GHz	Secondary	Secondary	400W (26 dBW)
77.5 to 78.0 GHz	Primary	Primary	1000W (30 dBW) <del>400W (26 dBW)</del>
			500 mW EIRP airborne
78 to 79 GHz	Secondary	Secondary	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)
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) <del>400W (26 dBW)</del> 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) <mark>400W (26 dBW)</mark> 500 mW EIRP airborne

#### Schedule 2

# Additional restrictions which apply to the Unattended Operation of Beacons

Frequencies	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	(1)	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

Frequencies	Full Licence, Full (Temporary Reciprocal) Licence, Full (Club) Licence	Intermediate Licence	Foundation Licence
10.0to 10.125 GHz	Not within 50 km of NGR SO 916223, SS 206127, NGRSK 985640 and NGR SE 202577.	Not within 50 km of NGR SS 206127, NGR SK 985640 or NGR SE 202577.	Not allocated
10.4to 10.475 GHz			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. Proposed Special Event Station NoV

A3.1 Below is an example of the proposed Special Event Call Sign NoV. Much of the existing text has been deleted as it repeated provisions already set out in the main licence conditions. Text that is highlighted in yellow are new provisions we propose to introduce.

#### 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:
  - i) It can reasonably be held that the Special Event call sign is likely to cause offence ; or
  - ii) Ofcom is satisfied that the Licensee does not propose to use the Special Event Call sign.

## A4. Responding to this consultation

- A4.1 Of com would like to receive views and comments on the issues raised in this document, by **5pm on 4 September 2023**.
- A4.2 You can download a response form from <u>https://www.ofcom.org.uk/consultations-and-</u> <u>statements/category-2/updating-amateur-radio-licensing-framework</u>. You can return this by email or post to the address provided in the response form.
- A4.3 If your response is a large file, or has supporting charts, tables or other data, please email it to <u>amateur.radio.review@ofcom.org.uk</u>, as an attachment in Microsoft Word format, together with the cover sheet.
- A4.4 Responses may alternatively be posted to the address below, marked with the title of the consultation:

Amateur Radio Review Ofcom FAO Spectrum Licensing PO Box 1285 WA1 9GL

- A4.5 We welcome responses in formats other than print, for example an audio recording or a British Sign Language video. To respond in BSL:
- A4.6 send us a recording of you signing your response. This should be no longer than 5 minutes. Suitable file formats are DVDs, wmv or QuickTime files; or
- A4.7 upload a video of you signing your response directly to YouTube (or another hosting site) and send us the link.
- A4.8 We will publish a transcript of any audio or video responses we receive (unless your response is confidential)
- A4.9 We do not need a paper copy of your response as well as an electronic version. We will acknowledge receipt of a response submitted to us by email.
- A4.10 You do not have to answer all the questions in the consultation if you do not have a view; a short response on just one point is fine. We also welcome joint responses.
- A4.11 It would be helpful if your response could include direct answers to the questions asked in the consultation document. The questions are listed at Annex 7. It would also help if you could explain why you hold your views, and what you think the effect of Ofcom's proposals would be.
- A4.12 If you want to discuss the issues and questions raised in this consultation, please contact Amateur Review at <u>amateur.radio.review@ofcom.org.uk</u>.

## Confidentiality

- A4.13 Consultations are more effective if we publish the responses before the consultation period closes. In particular, this can help people and organisations with limited resources or familiarity with the issues to respond in a more informed way. So, in the interests of transparency and good regulatory practice, and because we believe it is important that everyone who is interested in an issue can see other respondents' views, we usually publish responses on <u>the Ofcom website</u> at regular intervals during and after the consultation period.
- A4.14 If you think your response should be kept confidential, please specify which part(s) this applies to, and explain why. Please send any confidential sections as a separate annex. If you want your name, address, other contact details or job title to remain confidential, please provide them only in the cover sheet, so that we don't have to edit your response.
- A4.15 If someone asks us to keep part or all of a response confidential, we will treat this request seriously and try to respect it. But sometimes we will need to publish all responses, including those that are marked as confidential, in order to meet legal obligations.
- A4.16 To fulfil our pre-disclosure duty, we may share a copy of your response with the relevant government department before we publish it on our website. This is the Department for Business, Energy and Industrial Strategy (BEIS) for postal matters, and the Department for Culture, Media and Sport (DCMS) for all other matters.
- A4.17 Please also note that copyright and all other intellectual property in responses will be assumed to be licensed to Ofcom to use. Ofcom's intellectual property rights are explained further in our <u>Terms of Use</u>.

### **Next steps**

- A4.18 Following this consultation period, Ofcom plans to publish a statement by the end of 2023.
- A4.19 If you wish, you can <u>register to receive mail updates</u> alerting you to new Ofcom publications.

## **Ofcom's consultation processes**

- A4.20 Of com aims to make responding to a consultation as easy as possible. For more information, please see our consultation principles in Annex 5.
- A4.21 If you have any comments or suggestions on how we manage our consultations, please email us at <u>consult@ofcom.org.uk</u>. We particularly welcome ideas on how Ofcom could more effectively seek the views of groups or individuals, such as small businesses and residential consumers, who are less likely to give their opinions through a formal consultation.
- A4.22 If you would like to discuss these issues, or Ofcom's consultation processes more generally, please contact the corporation secretary:

Corporation Secretary Ofcom Riverside House 2a Southwark Bridge Road London SE1 9HA Email: <u>corporationsecretary@ofcom.org.uk</u>

## A5. Ofcom's consultation principles

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

#### Before the consultation

A5.1 Wherever possible, we will hold informal talks with people and organisations before announcing a big consultation, to find out whether we are thinking along the right lines. If we do not have enough time to do this, we will hold an open meeting to explain our proposals, shortly after announcing the consultation.

#### **During the consultation**

- A5.2 We will be clear about whom we are consulting, why, on what questions and for how long.
- A5.3 We will make the consultation document as short and simple as possible, with an overview of no more than two pages. We will try to make it as easy as possible for people to give us a written response.
- A5.4 We will consult for up to ten weeks, depending on the potential impact of our proposals.
- A5.5 A person within Ofcom will be in charge of making sure we follow our own guidelines and aim to reach the largest possible number of people and organisations who may be interested in the outcome of our decisions. Ofcom's Consultation Champion is the main person to contact if you have views on the way we run our consultations.
- A5.6 If we are not able to follow any of these seven principles, we will explain why.

#### After the consultation

A5.7 We think it is important that everyone who is interested in an issue can see other people's views, so we usually publish the responses on our website at regular intervals during and after the consultation period. After the consultation we will make our decisions and publish a statement explaining what we are going to do, and why, showing how respondents' views helped to shape these decisions.

## A6. Consultation coversheet

## **BASIC DETAILS**

Consultation title: To (Ofcom contact): Name of respondent: Representing (self or organisation/s): Address (if not received by email):

### CONFIDENTIALITY

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

Nothing	
Name/contact details/job title	
Whole response	
Organisation	
Part of the response	
If there is no separate annex, which parts?	

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

### DECLARATION

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

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

Signed (if hard copy)

Name

## A7. Consultation questions

**Question 1:** Do you agree with our proposal that each licensee should only be able to hold one personal licence? Do you have any other comments on this proposal?

**Question 2**: Do you agree with our proposals to permit greater supervised use of the radio equipment by others? Do you have any other comments on this proposal?

**Question 3:** Do you agree with our proposal to use M8 and M9 for Intermediate licensees going forward? Do you have any other comments on this proposal?

**Question 4:** Do you agree with our proposals to change our policies on the use of RSLs? Do you have any other comments on this proposal?

**Question 5:** Do you agree with our proposals to allow the use of any suffix? Do you have any other comments on this proposal?

**Question 6:** Do you agree with our proposals to allow a change of call signs? Do you have any other comments on this proposal?

**Question 7:** Do you agree with our proposals on the limits to how many call signs can be held? Do you have any other comments on this proposal?

**Question 8:** Do you agree with our proposal to simplify special event call signs? Do you have any other comments on this proposal?

**Question 9:** Do you agree with our proposals to increase transmit power? Do you have any other comments on this proposal?

**Question 10**: Do you agree with our proposed changes to remote control operation? Do you have any other comments on this proposal?

**Question 11**: Do you agree with our proposed changes to Beacon operation? Do you have any other comments on this proposal?

**Question 12**: Do you agree with our proposed changes to Gateways? Do you have any other comments on this proposal?

**Question 13**: Do you agree with our proposed changes to repeaters? Do you have any other comments on this proposal?

**Question 14**: Do you agree with our proposed changes to allow Foundation Licence holders to build their own equipment and access the 2.4 GHz and 5 GHz frequency bands? Do you have any other comments on this proposal?

**Question 15:** Do you agree to Ofcom's proposals to permit some limited airborne use? Do you have any other comments on this proposal?

**Question 16:** Do you agree to Ofcom's proposed changes in licence format and the alignment of standard terms and conditions? Do you have any other comments on this proposal?

**Question 17:** Do you agree to Ofcom's proposed changes to the licence terms and conditions? Do you have any other comments on this proposal?