



Requirements for Approved Radio Examiners (PIB 45)

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Table of Contents

1. Introduction	3
1.1. Contents	3
1.2. Disclaimer	3
1.3. Changes	3
1.4. Clarification and Corrections.....	3
1.5. Amendment History	3
2. General	4
2.1. Purpose of this Public Information Brochure.....	4
3. Statutory Requirements	5
3.1. Requirements for Issuing Radio Operator Certificates and Callsigns	5
3.2. Principal Requirements for Approved Persons	5
4. Approved Person Declaration	6
5. Ethical Standards for Approved Radio Examiners.....	7
5.1. Knowledge, Experience and Competency Standards.....	8
5.2. Scope of experience expected for an Approved Radio Examiner.....	8
6. Qualification Standards	9
6.1. Approved Radio Examiner Maritime.....	9
6.2. Approved Radio Examiner Amateur.....	9
6.2.1. Application Process	9
7. The Approval Process	10
7.1. Authorisation	11
7.2. Period of Authorisation.....	11
7.3. Requirements for the Retention of the Approved Person Status.....	11
8. Process for the Revocation of Approved Status	12
9. Requirements for Examination environment	13
9.1. Requirements for the Examination.....	13
9.2. Audit Requirements relating to Examinations	13
9.3. Records to be available for Audit Purposes	14
Appendix A: Application Form	15
Appendix B: Notes for the Completion of Application Form and Work History	16

1. Introduction

1.1. Contents

This Public Information Brochure, *Requirements for Approved Radio Examiner (PIB 45)*, specifies the current practices and policies of Radio Spectrum Management (RSM) of the Ministry of Business, Innovation and Employment (the Ministry) in regard to requirements for approved radio examiners.

1.2. Disclaimer

The Ministry of Business, Innovation and Employment (the Ministry), makes no warranty, express or implied, nor assumes any liability for any loss suffered, whether arising directly or indirectly, due to sole reliance on the accuracy or contents of this Public Information Brochure (PIB 45).

1.3. Changes

Radio Spectrum Management (RSM) may change, delete or add to, or otherwise amend information contained in this document from time to time to reflect evolving policies. Changes to this document will be notified through the 'Radio Spectrum Management Business Update' e-newsletter that is emailed to those who subscribe. The changes are also notified in the news section on the [RSM website](#).

1.4. Clarification and Corrections

RSM will provide clarification of the information contained in this document when requested and would appreciate receiving suggestions for improvement or advice relating to inaccuracies or ambiguity in this document. Such matters may be emailed to rsmlicensing@mbie.govt.nz. Correspondence received will be acknowledged, investigated and appropriate action taken.

1.5. Amendment History

Issue	Date of effect	Description of Amendment
1	February 2008	Draft preparatory document
2	November 2012	Edition 1
3	December 2014	Minor editorial and formatting changes
4	October 2016	Additional GMDSS Operator's Format and minor editorial changes

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2. General

2.1. Purpose of this Public Information Brochure

This Public Information brochure, Requirements for Approved Radio Examiners (PIB 45), outlines the requirements of the Ministry of Business, Innovation, and Employment (the Ministry) for applicants wishing to become an approved radio examiner (ARX) (approved persons):

- the regulatory requirements for those approved persons
- the Radio Spectrum Management (RSM) process for granting or declining an application
- the requirements for retaining the ARX status.

Attainment of the status of ARX entitles the approved person to:

- examine the competency of persons wishing to obtain radio operator's certificates of competency
- issue certificates of competency to competent persons
- issue callsigns
- access the online [Register of Radio Frequencies \(the Register\)](#) for the purposes of maintaining operator certificates and callsign records

An ARX must be a respected and knowledgeable person working in the radio communications community. They may be employees of the Ministry (internal examiners), or persons outside the Ministry (external examiners).

Only a natural person, as prescribed in [Legal entities for the purposes of the Radiocommunications Act 1989](#) (PIB 47), can become an ARX. A business entity cannot hold an approved person status, but they may employ or contract such approved persons.

3. Statutory Requirements

The statutory requirements for managing the radio spectrum in relation to radio operator certificates of competency and callsigns in the amateur and maritime services are prescribed in legislation:

- Section 134 (1)(e) and (1)(f) of the [Radiocommunications Act 1989 \(the Act\)](#).
- Regulations 22 to 31 inclusive of the [Radiocommunications Regulations 2001 \(the Regulations\)](#).
- Article 47 and Appendix 42 of the [International Telecommunications Union \(ITU\) Radio Regulations](#).

Changes to these statutory requirements are made from time to time.

3.1. Requirements for Issuing Radio Operator Certificates and Callsigns

Prior to the issuing of a radio operator's certificate or a callsign, an ARX must ensure that the radio operator certificate or callsign conforms to the statutory requirements in the RSM publication [Radio Operator Certificate and Callsign Rules](#) (PIB 46).

3.2. Principal Requirements for Approved Persons

The role of approved persons to issue operator certificates of competency and callsigns is to ensure that those certificates and callsigns comply with the statutory requirements in a manner that will maintain the utility of the radio spectrum for the benefit of all New Zealanders.

Approved persons shall not provide certificates of competency or callsigns that conflict with the statutory requirements or the [Radio Operator Certificate and Callsign Rules](#) (PIB 46).

Where an approved person considers there may be conflicts between the published documents; and between those documents and their client's requirements, that person shall contact RSM for clarification and/or adjudication.

The Ministry is required to ensure that only persons who understand and share these requirements, and have the knowledge, experience and competence to apply the statutory requirements and PIB 46 in an ethical manner, will be approved persons.

4. Approved Person Declaration

Applicants for the ARX status are required to complete the form “Application for Approved Radio Examiner (ARX) Status” (see Appendix A: Application Form).

The applicant must sign the application form. By signing the application form the applicant declares that:

1. The information they have given in this application is, to the best of their knowledge, true, complete, and correct.
2. They will notify RSM of any changes of address, and other situation changes relevant to their approved person status.
3. They will only issue radio operator certificates in regard to which they believe they have the requisite level of technical and or operational competency.
4. They will only issue certificates and allocate callsigns that comply with the regulatory requirements and the [Radio Operator Certificate and Callsign Rules](#) (PIB 46).
5. They will not knowingly issue any radio operator’s certificate or allocate a callsign where operations pursuant to that certificate or callsign will be illegal.
6. They will not in regard to any information that may come into their possession concerning records withheld under section 28 of the Radiocommunications Act 1989, divulge the information to other persons.
7. They will retain records relating to operator’s examinations they conduct, for a period of five years, and produce these on request to RSM.
8. They accept that their name, contact details, ARX number, and approval details will be published on the RSM website list of all approved radio examiners (ARX).
9. They accept that certificates and callsigns they issue may be subject to audit.

This declaration, except for (6), shall be in force for the duration an ARX retains that status. The declaration in respect to (6) shall remain in force in perpetuity.

An Approved person who knowingly does not abide by their declaration will have their approved person status revoked.

5. Ethical Standards for Approved Radio Examiners

When applying to become an approved person, applicants must provide evidence to RSM of a level of integrity that gives the assurance that they will abide by their declaration on their application form, and that the work they undertake will be completed:

- a) Without seeking to interpret RSM's or other published information in a manner that could expose other licensed radio spectrum users to harmful or other interference, or otherwise limit the potential for use of the radio spectrum.
- b) Only after seeking guidance from RSM on matters where the approved person considers the published information to be unclear or inconsistent.
- c) Only where a proposed operator certificate or callsign will not, to the best of their knowledge, be used to carry out illegal activities or activities that could lead to the endangerment of life and/or property.
- d) In a manner that ensures any detrimental effects pursuant to the use of an operator's certificate or callsign issued by them will be minimised to the extent reasonably possible.

The applicant's evidence will be the provision on their application of two referees who are well regarded in the radio communications community and are able to knowledgeably and freely identify that the applicant can be expected to meet these ethical standards.

When evaluating a matter of concern, RSM will consider if a lack of experience has led to the matter. In this instance, RSM does not intend that a past isolated error should prevent the granting of approved person status, nor will it knowingly put at risk its responsibilities to protect the integrity of the radio operator certificate and callsign regime.

Where RSM considers there may be ethical concerns, either with an applicant or an existing approved person, they will be discussed with the applicant or approved person and investigated to clarify the extent of those concerns.

If RSM determines that the applicant does not satisfy the requirements then their application is declined.

Should the Ministry deem an existing approved person has failed to meet their requirements as an ARX, then the ARX status will be revoked. The process for revocation of approved status is noted in section 8 of this document.

5.1. Knowledge, Experience and Competency Standards

ARX applicants are expected to have:

- a) Knowledge of the Act and the Regulations.
- b) An awareness of Gazette Notice publications for advising changes and other requirements in relation to the regulatory requirements.
- c) An understanding of radio spectrum planning, policies, and management in relation to the radio licensing regime.
- d) A familiarity with RSM Public Information Brochures (particularly PIB 46) and other publications that provide discussion on these rules and other related issues.
- e) A familiarity with the RSM web site, the Radio Spectrum Management Business Update and News Flash facilities for advising changes and news relating to radio spectrum management.
- f) An awareness of radio service types, licence types, licence fees, and licence fee payment methods.
- g) An awareness of the ITU Radio Regulations and ITU-R Recommendations.
- h) An appreciation of radio technologies, their uses and limitations.
- i) Some theoretical and practical experience of radio propagation issues, signal strength calculations, interference mechanisms (intermodulation), radio receiver and transmitter technologies, antennas, feeders, and ancillary devices.
- j) A practical knowledge of radio site installation and ancillary equipment practices.
- k) Familiarity with typical radio system configurations, equipment issues, and practices.
- l) Self-awareness in relation to the gaps in their knowledge and ability to issue radio operator certificates and callsigns.

The level of knowledge required for parts (a) to (j) above is dependent on the type of radio operator certificate to be examined.

If RSM determines that the applicant does not satisfy these requirements then their application will be declined.

5.2. Scope of experience expected for an Approved Radio Examiner

An ARX should have practical knowledge of the radio licensing framework. They will be experienced in the technical and operational issues associated with the radio services appropriate to the range of radio operator certificates and callsigns they intend to provide:

- a) Experience in the installation, commissioning and maintenance of radio systems and equipment.
- b) A practical knowledge of radio transmitter and receiver technologies and their operational and performance characteristics.
- c) Operational experience in the use of radio systems.

6. Qualification Standards

6.1. Approved Radio Examiner Maritime

An applicant for the Maritime ARX status must hold:

- a maritime radio operator's certificate of competency at least one level higher than the radio operator's certificate for which they intend to examine, or
- a maritime radio operator's certificate with at least five years operational experience at the same level for which they intend to examine.

6.2. Approved Radio Examiner Amateur

An applicant for the Amateur ARX status must hold two qualifications:

1. A New Zealand General Amateur Operator's Certificate.
2. A New Zealand Qualifications Authority (NZQA) National Certificate in Telecommunications (Level 4), or equivalent (or higher) qualification, specialised in radio.

6.2.1. Application Process

An application for ARX status must be submitted in writing to:

Manager RSM Licensing
Radio Spectrum Management
Ministry of Business, Innovation and Employment
PO Box 2847
Wellington 6140

The complete application shall comprise the following:

- a) A completed and signed Application Form as prescribed in Appendix A: Application Form.
- b) A complete work experience history.
- c) Certified copies of qualification certificates (except where RSM holds the original certificate record).

Notes on how to complete the Application Form and work history is included in Appendix B: Notes for the Completion of Application Form and Work History. Enquiries regarding the application process should be emailed to rsmlicensing@mbie.govt.nz.

An incomplete application will be returned to the applicant.

Organisations wanting to become an accepted School for the examination of the Maritime General Operator's Certificate (MGOC) will be individually assessed on application to RSM. Applicants must be able to document and demonstrate that they have the necessary equipment for "Detailed practical knowledge of the operation of all the GMDSS sub-systems and equipment" as prescribed in Article 47, Table 47-1 of the ITU Radio Regulations.

7. The Approval Process

On receipt of an application, RSM will check the application for completeness and acknowledge receipt with the applicant. RSM will then process the application as detailed:

- a) Assess the applicant's qualifications and work history.
- b) Contact the applicant's referees (by telephone) to discuss the applicant's relevant experience, competence and suitability.
- c) Contact a RSM Radio Inspector, who may know the applicant, to discuss the applicant's relevant experience, competence and suitability.
- d) Discuss with the applicant (by telephone) any matters arising from discussions in (b) and (c) above.
- e) Discuss with the applicant their understanding and familiarity of the radio regulatory regimes, general spectrum management issues, the [RSM website](#) and the Register.
- f) Ask the applicant to talk through the basic steps they might take in processing an application for a radio operator's certificate or callsign.
- g) Prepare a brief report on the applicant's suitability for ARX status for consideration by the Manager Licensing.

If the application is approved, then RSM will write to the applicant advising of their approval. RSM will then arrange the necessary steps to give applicable access to the Register:

1. Provide a 1-day training course on the certificate and callsign module in the Register.
2. Create a client record for the applicant in the Register so they can create their own Register logon.
3. Add the new ARX details on the [RSM website](#) "Register of all approved radio examiners (ARX)".

On completion of the above, RSM will send the applicant a letter of authorisation advising that they have been granted the approved person status and may commence ARX activities in the Register.

If the applicant does not meet the required standard for reasons concerning ethics, knowledge, experience, competence, or qualifications, RSM will discuss these issues with the applicant. The application will be declined if the issues cannot be resolved to the satisfaction of RSM.

When making a final decision, RSM will not knowingly put at risk its responsibilities to protect the radio spectrum, certificate and callsign records, or processes.

7.1. Authorisation

The letter of authorisation will consist of two parts.

Part one is a letter setting out the conditions of the authorisation as determined by RSM, including the examiner number and the radio operator qualifications to be examined. This will be signed by the Chief Executive Officer of the Ministry of Business, Innovation, and Employment, or an officer with appropriate delegated authority under Regulation 22A of the Radiocommunications Regulations 2001.

Part two is a copy of Part one, which must be signed by the examiner to confirm acceptance of the conditions contained. This copy must be returned to RSM.

7.2. Period of Authorisation

Once authorisation is granted, it will remain in force until relinquished by the approved person or revoked¹ by the Ministry. This may be subject to review by RSM at any time.

7.3. Requirements for the Retention of the Approved Person Status

The approved person status shall be retained on the conditions that they:

- a) Will continue to abide with the declaration they made on their application to become an ARX.
- b) Will retain the level of integrity required for approved person status.
- c) Will maintain and grow their knowledge and competency for the range of ARX services that they provide.
- d) Will consistently issue radio operator certificates and callsigns which conform to the statutory requirements and the [Radio Operator Certificate and Callsign Rules](#) (PIB 46).

¹ Radiocommunications Regulations 2001 section 22A (2)(b).

8. Process for the Revocation of Approved Status

In determining an approved person's failure to comply with the requirements for approved person status, RSM will consider whether the failure is due to a lack of experience that can be corrected, or is a significant breach of the requirements and revocation of a person's approved status is the appropriate action.

Significant breaches of approved person requirements include:

- a) found to have submitted an application for approved status which contains false or misleading information,
- b) proven to have committed an offence under the Crimes Act or any other Act where the offence clearly demonstrates a wilful disregard for New Zealand law,
- c) continued to issue radio operator certificates and callsigns that do not conform to the statutory requirements and [Radio Operator Certificate and Callsign Rules](#) (PIB 46), despite being advised by RSM about these concerns,
- d) failed to take appropriate action to conform to the Ministry's requirements after the provision of due notice by RSM,
- e) unable to be contacted by RSM.

If RSM believes there is a situation where revocation of the approved person status is appropriate, then the ARX will be advised in writing and given the opportunity to review the matter with RSM.

RSM reserves the right to withdraw an ARX's access privileges to the Register for the period following discovery of the event and for the duration of any investigation, until a decision is made to reinstate the approved person.

9. Requirements for Examination environment

The examination facility must be suitable for the conducting of radio operator examinations:

- a) The premises should meet occupational health and safety requirements, including the [Health and Safety at Work Regulations 2016](#). Further information can be found on the [Worksafe New Zealand](#) website
- b) The premises should be appropriately sized for proposed class numbers.
- c) The environment should be free from distraction and interruption.
- d) The appropriate radio equipment where prescribed for the appropriate course.
- e) Where activities are to be carried out on-board a vessel, the vessel's radio equipment must be fit for purpose, provide a realistic environment and be appropriate for the course.

9.1. Requirements for the Examination

The examination must meet the syllabus requirements of the [Radio Operator Certificate and Callsign Rules](#) (PIB 46).

Examinations are to be undertaken by candidates under the direct supervision of an exam supervisor. The exam supervisor may or may not be an ARX.

The supervisor must not provide information or advice, other than that relevant to the examination procedure.

On completion of the examination, written papers are to be collected from candidates, sealed in a suitable envelope and directly passed to the ARX for assessment and grading.

9.2. Audit Requirements relating to Examinations

RSM mandates that all examinations conducted by approved persons are subject to audit on request. These audits may be undertaken to provide general assurance that examinations are conducted in accordance with the statutory requirements and the rules in PIB 46. The selection of examinations for audit may be made on a random or specific basis.

To provide for such auditing, RSM requires approved persons to retain records of all the examinations they have conducted. The extent of the information and the period of retention are identified in section 9.3 below. A copy of those records must be supplied to RSM within 10 working days of their request.

The results of the audits may be used to determine the competency of approved persons and may result in the provision of advice for future applications or other actions.

9.3. Records to be available for Audit Purposes

Relevant examination records are to be retained by the ARX for audit purposes:

- a) Examiner name (the person who sets and marks the examination and who may be contacted in relation to the examination).
- b) Examination date and time.
- c) Examination venue.
- d) Candidate details: name, address, contact phone number/s, and email address.
- e) The examination questionnaire identifying the qualification being examined i.e. GAOC, MGOC, MROC, MLROC, MSROC, MGROC, MRROC and MVOC.
- f) The candidates answer papers and or practical assessment check sheets.
- g) Examination results, i.e. Pass/Fail (determined after examiner has marked).
- h) Name and contact details of examination Supervisor if examination is not directly supervised by an ARX.

Appendix A: Application Form

Application for Approved Radio Examiner (ARX) Status

Print clearly and attach copies of relevant documents (qualifications, references etc.)

Applicant's Details:	
Name Title: <input type="checkbox"/> Mr <input type="checkbox"/> Mrs <input type="checkbox"/> Miss <input type="checkbox"/> Ms <input type="checkbox"/> Other _____ SURNAME: GIVEN NAMES:	Residential or Business Address Postcode
Contact Information Home Phone: Work Phone: Mobile Phone: Fax: Email:	Postal Address Postcode
Qualifications & Referees:	
Highest level of Radio Operator competency held:	
1st Referee details: Name: Address: Telephone: Email:	2nd Referee details: Name: Address: Telephone: Email:
Examinations for which authority is applied for:	
<input type="checkbox"/> NZ General Amateur Operator's Certificate <input type="checkbox"/> Maritime General Operator's Certificate <input type="checkbox"/> Maritime Restricted Operator's Certificate <input type="checkbox"/> Maritime Long-range Operator's Certificate	<input type="checkbox"/> Maritime Short-range Operator's Certificate <input type="checkbox"/> Maritime General Radiotelephone Operator's Certificate <input type="checkbox"/> Maritime Restricted Radiotelephone Operator's Certificate <input type="checkbox"/> Maritime VHF Operators Certificate
Applicant Declaration:	
(1) I declare that the information I have given in this application is, to the best of my knowledge, true, complete, and correct. (2) I will notify RSM of any changes of address, or other situation changes relevant to my approved person status. (3) I will only issue radio operator certificates in regard to which I believe I have the requisite level of competency. (4) I will only issue radio operator certificates and callsigns that comply with regulatory requirements and the <i>Radio Operator Certificate and Callsign Rules (PIB 46)</i> . (5) I will not knowingly issue any radio operator certificate or allocate any callsign where operations pursuant to that certificate or callsign will be illegal. (6) I will not, in regard to any information that may come into my possession concerning records withheld under section 28 of the Radiocommunications Act 1989, divulge the information to other persons. (7) I will retain records relating to operator's examinations I conduct, for a period of 5 years, and produce these on request to RSM. (8) I accept that my name, contact details, ARX number, and approval details will be published on the RSM website register of all radio examiners (ARX).	
Signature:	Date:

Appendix B: Notes for the Completion of Application Form and Work History

What information you need to provide on your application:

- Your full name and full contact details.
- Your highest relevant Radio Operator Certificate/s of competency held.
- The name and contact details of two referees who can provide you with a character reference and can verify your work experience.
- The examination/s for which you request authority.
- Your signature and the date of signing.

What you need to include with your application:

- A copy of your relevant educational qualifications and/or Radio Operator's Certificates of competency.
- A work history as detailed below.

You should note that the signing of the application form is a declaration that the information in your application is true, complete, and correct, and that you will, to the best of your ability, conduct examinations, issue radio operator certificates and callsigns in accordance with the Radiocommunications Act 1989, the Radio Regulations 2001, and the [Radio Operator Certificate and Callsign Rules](#) (PIB 46) published by RSM.

When completing the application form, you should note that your ARX details will be published on the RSM website if your application is successful.

Completing your Work History

You should outline your experience in fields of employment related to the radio communications industry. While there is no minimum period requirement, relevant experience and skills should be submitted for consideration:

- a) Radio operator experience.
- b) Radio system installation, commissioning, and maintenance experience.
- c) Radio propagation analysis experience.
- d) Radio interference resolution experience, including intermodulation considerations.
- e) Exposure to the wider New Zealand radio communications environment.
- f) An understanding and knowledge of the regulatory framework for radio spectrum management.
- g) A proficiency in the English language.

When preparing the work history, cover all main periods of relevant employment, but be concise.