



An Coimisiún um
Rialáil Cumarsáide
Commission for
Communications Regulation

CEPT Harmonised Amateur Radio Examination Certificate

Information document for parties interested in conducting the Irish examinations for the CEPT Harmonised Amateur Radio Examination Certificate.

General Document

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1 Introduction

1. To apply for an Amateur Station¹ licence ComReg requires applicants to have successfully passed an examination to be issued a CEPT² Harmonised Amateur Radio Examination Certificate (“HAREC”).
2. The Commission for Communications Regulation (“ComReg”) is seeking expressions of interest from parties who are interested in setting, organising, and marking examinations for the CEPT HAREC as outlined in Electronic Communications Committee Recommendation T/R 61-02 (“ECC/REC/T/R 61-02”), as amended.³
3. ComReg will assess all expressions of interest received on or before the deadline of **07 01 22**, to determine if any Participants are competent to carry out the Services to the required standard.
4. If a Preferred Participant is selected, then the Commission will enter into an agreement for an initial three-year period, which may be extended subject to the services being carried out to the required standard, and in the absence of any interest from other parties to undertake the services.

¹ Amateur station means a station in the amateur service.

² CEPT - The European Conference of Postal and Telecommunications Administrations

³ <https://docdb.cept.org/download/e4b9c459-5726/TR61-02.pdf>

2 Background

1. In 2005 ComReg sought expressions of interest for conducting the Irish examinations for the CEPT HAREC (“the examinations”).⁴ The result of that invitation to tender was that the Irish Radio Transmitters Society (“IRTS”) was selected as the preferred participant and an agreement was signed between ComReg and the IRTS. That agreement was subsequently renewed in 2008, 2011 and 2016 due to no other parties expressing interest in conducting the examinations.
2. In Document 21/90⁵, ComReg noted that the agreement with the IRTS is due to on 21 December 2021 and would invite interested parties to submit an expression of interest for conducting the examinations for the CEPT HAREC. ComReg is of the view that to do so would be in line its principles on procurement.

Legislation

3. The Amateur Service is defined by the International Telecommunication Union (ITU) as: *"A radiocommunication service for the purpose of self-training, intercommunication and technical investigations carried out by amateurs, that is, by duly authorised persons interested in radio technique solely with a personal aim and without pecuniary interest."*
4. In accordance with article 25 of the ITU Radio Regulations, administrations are responsible to verify the operational and technical qualifications of any person wishing to operate an amateur station.
5. For the administration of Ireland, ComReg is the regulatory body responsible for the management of the radio spectrum resource and issues Amateur Station Licences under the Wireless Telegraphy (Amateur Station Licence) Regulations, Statutory Instrument No. 192 of 2009.

⁴ ComReg document 05/10 – Radio Experimenter Examinations: Information document for parties interested in conducting the Irish Radio Experimenter Examinations according to CEPT ECC REC T/R 61-02 – published 14 February 2005. <https://www.comreg.ie/publication-download/radio-experimenter-examinations>

⁵ ComReg document 21/90 – Proposed Strategy for Managing the Radio Spectrum 2022 to 2024 – published 10 September 2021. <https://www.comreg.ie/media/2021/09/ComReg-2190.pdf>

6. An Amateur Station Licence allows the licensee (also referred to as a Radio Amateur) to participate in what is a hobby with no commercial aspects. Radio Amateurs are also permitted to provide a means of communications during emergencies or natural disasters, as may be needed. A licensed Radio Amateur can use radio equipment to communicate with other licensed Radio Amateurs, located in the State or abroad. The mode of communication can be as simple as Morse code transmission, voice, or more complex modes such as video or data.
7. In order to apply for an Amateur Station Licence, the applicant must have successfully passed an examination to the ECC/REC/T/R 61-02 HAREC standard (“the HAREC standard”).⁶ This standard is based on electronic theory, regulatory terms and best practices in radio operation and safety. ComReg does not recognise any other qualification for the purposes of granting an Amateur Station Licence.

⁶ See Annex 1 of ECC Recommendation T/R 61-02. <https://docdb.cept.org/download/e4b9c459-5726/TR61-02.pdf>

3 Examinations

8. The purpose of the examinations is to establish if a candidate can demonstrate a satisfactory understanding of the technical requirements and procedures for operating an Amateur Station.

3.1 Examination Format

9. The examinations format shall consist of the following three compulsory sections with multiple-choice questions:

- a) **Section A – Elementary Theory of Radiocommunications**

This section consists of questions relating to electromagnetic fields, electronic components and circuits, safety, transmitters, and propagation etc.

- b) **Section B – National and International Operating Rules and Procedures:**

This section consists of questions relating to such matters as use of Q-Code, bands allocated to the Amateur/Experimenter service, call-signs and record keeping etc

- c) **Section C – National and International Regulations Relevant to the Amateur Service and Amateur Satellite Service:**

This section consists of questions relating to ITU Radio Regulations, CEPT Regulations, and National Laws, Regulations and Licence Conditions.

10. The topics to be examined must conform with the HAREC syllabus as outlined in Annex 6 of ECC/REC/T/R 61-02, as amended.
11. The syllabus must be covered in enough detail in the exam so that ComReg can satisfy itself that successful candidates are suitably qualified to be issued an Amateur Station Licence.
12. The exam shall consist of 60 questions in total for the three sections above. The allocation of questions to the three exam sections will be discussed and agreed with the Preferred Participant.

13. The multiple-choice question format shall be used where the examination candidates chose one option from a list of possible answers, of which only one answer is correct option, i.e. one answer cannot be more correct than another answer.
14. Participants should also pay attention to any proposed marking scheme and pass mark in this regard.⁷ ComReg regards a minimum pass mark of 50% in each of the three sections as being obligatory.
15. To avoid guessing and random selection by candidates ComReg is interested in views of Participants on the option of using a negative marking scheme.

Appeals

10. Any appeals against the result of the examinations must be made in writing to ComReg within 28 days of the recorded notification of the result. The decision of ComReg will be final.

⁷ Currently, candidates are required to achieve an overall mark of 60% and a 60% mark per section to have past the exam and be issued a HAREC.

4 Services

16. The conducting of the Irish examinations for the CEPT HAREC will involve:

- Responsibility for setting, organising and marking the examinations for the CEPT HAREC, in line with the HAREC standard⁸;
- Submitting the proposed exam paper to ComReg no later than 30 working days before the date on which the examinations is due to be held. This is so ComReg can determine if the proposed exam paper is HAREC compliant to ensure successful candidates are suitably qualified.
- Providing for each proposed examination paper a clear and unambiguous marking scheme, detailing the breakdown and allocation of marks for each question.
- Maintain an unpublished question pool with ComReg. The question pool shall be maintained at no less than 400 questions.
- Notifying ComReg of the results within 10 working days of the exam date.
- The procurement of suitable premises⁹ in which to hold the examinations and submitting the time, date and venue of the exam to ComReg no later than 30 working days before the date the examinations is due to be held;
- No administrative assistance from ComReg in setting, organising and marking the examinations;
- Holding a minimum of one examination per annum;
- Facilitating candidates with physical or other impairments, to:
 - Suitably and comfortably access the premises where the examinations is to take place; and
 - take the exam by means of oral examination or other suitable means.

⁸ And in accordance with all other relevant applicable laws and regulations, such as for instance, the Data Protection Act 2018, and the General Data Protection Regulation.

⁹ The current format of in-person exams is preferred, but ComReg will explore, in the future, the possibility and feasibility of conducting online examinations.

- The Preferred Participant selected to conduct the examinations, or its staff/members, shall not conduct or be involved in, in any way whatsoever, in any course of instruction which is intended to prepare candidates for the examination.

Remuneration

17. The Preferred Participant will be allowed to charge an exam fee which will be subject to the prior approval of ComReg. No funding will be received from ComReg nor will any fees be payable to ComReg.

Duration of Services Agreement

18. If a Preferred Participant is selected, the agreement shall begin upon the date the agreement is signed, for a period of three years. The agreement may be subsequently extended for a further period of three years, subject to:

- a. agreement between ComReg and Preferred Participant;
- b. the services being carried out to the required standard; and
- c. in the absence of any interest from other parties seeking to undertake the Services.

5 Proposal Format

19. All proposals must contain the following information:

- A detailed description of how the Participant intends to provide the Service requirements in Section 4;
- A detailed description of how the Participant intends to ensure the integrity and transparency of the process including the exclusion of the examination personnel from the provision of courses relevant to the examinations;
- A proposal on how suitable premises will be procured for the examinations;
- Evidence of similar work, if any, completed by the Participant over the past five years. A minimum of three complete references must be submitted;
- A description and justification of the examination fee, if any, the Participant intends to charge;
- A specimen (multiple choice) examination paper and proposed examination marking scheme and required pass marks;
- A description of the size of the proposed question pool and whether negative marking is to be used in the case of a multiple-choice examination;
- The proposed question pool must be suitably large enough to minimise learning by rote and must adequately prove a candidate's knowledge;
- A detailed description of how candidates with physical or other impairments would be accommodated to comfortably sit the examination; and
- Resumés (including Name and contact information) or background descriptions of all key personnel to be assigned to undertake the Services;

6 Assessment and Scoring

20. Proposals will be assessed and scored according to the following criteria:

- Previous experience in setting, organising and marking examinations for HAREC or extensive experience as a licensed Radio Amateur with more than five years active involvement in a Radio Amateur society or club;
- Demonstrable knowledge of the HAREC standard¹⁰. This could include, but not be limited to:
 - Participant providing evidence that they have, including its staff/members where appropriate, have been issued with a HAREC and an Amateur Station licence(s).
 - have conducted or be involved running and/or setting courses of instruction to prepare candidates for the examination.
- Knowledge of the materials currently available that are used to prepare candidates to take the examinations;
- Understanding of the services required and proposals for carrying out the services set out in section 4; and
- An example examination paper with a clear and unambiguous marking scheme, detailing the breakdown and allocation of marks for each question.
- A description and justification of the examination fee, if any, the Participant intends to charge.

21. The scoring template to be used is in Annex 1.

¹⁰ ECC Recommendation T/R 61-02 outlines the specifications of the HAREC certificate, and the standards required.

7 Submission of Proposals

22. Proposals must be received no later than: 17:00 hrs on **7th of January 2022**. Proposals received after this time will not be evaluated. Proposals should be in the format outlined above.

23. ComReg reserves the right to obtain clarification of any point in a proposal or to obtain additional information necessary for the proper evaluation of a particular proposal. This may include presentation of the proposals, virtually or in person. Failure to respond to such a request for additional information or clarification may result in the disqualification of the Participant.

8 Legal Disclaimer

24. This Information Document is issued for guidance only and does not constitute a warranty nor does it form part of any agreement into which ComReg may enter.

Annex: 1 Scoring Template

A 1.1 Participants must submit a proposal that separately addresses each of the Award Criteria set out below.

Award Criteria	Award Criteria Heading	Maximum Score Available
A	Previous experience in setting, organising and correcting Radio Amateur examinations or extensive experience as a licensed Radio Amateur with more than five years active involvement in a Radio Amateur society or club.	10
B	Demonstrable knowledge of the CEPT HAREC standard	10
C	Understanding of the services required and proposals for carrying out the services set out in Section 4.	50
D	An example examination paper with a clear and unambiguous marking scheme, detailing the breakdown and allocation of marks for each question	20
E	<p>Proposed examination fee</p> <p>The proposal with the lowest proposed examination fee will be awarded 100% of the marks available.</p> <p>The evaluation will be undertaken in accordance with the price evaluation methodology set out as follows: Score awarded = ((Maximum points * lowest proposed examination fee) / Participant's proposed examination fee)</p> <p>Note: ComReg reserves the right not to select the proposal with the lowest examination fee</p>	10
	Total	100