



Radiological Protection Institute of Ireland

An Institiúid Éireannach um Chosaint Raideolaíoch

**Re-approval criteria for Category I
Radiation Protection Advisers**

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Introduction

Article 19 of S.I. No. 125 of 2000 requires the RPII to establish and maintain a register containing the names of persons it has approved to act as Radiation Protection Advisers (RPA). This Article also provides for the RPII to determine educational, training or other requirements, compliance with which it determines to be necessary before it can approve a person to act as an RPA. Once the RPII has approved an individual to act as an RPA, the approval is normally valid for a period of five years from the date the approval is granted.

It is essential that all approved RPAs retain a good knowledge of the principles and practice of radiation protection and are aware of changes in radiation protection philosophy and regulations as these are promulgated. RPAs seeking re-approval should be aware of the implications for radiation protection of new medical and dental technologies and procedures, and of changes in such technologies and procedures.

RPA's whose approval is due to expire are invited to apply to the RPII for their approval to be renewed for a further five years. This guidance note sets out the criteria with which applications for re-approval will be assessed by the RPII.

Re-approval Criteria

RPAs wishing to apply for a renewal of their RPA registration will be required to demonstrate to the RPII that they have met the following criteria:

Maintaining core competencies

When the individual first applied for approval to act as an RPA, the RPII considered in detail whether he or she met the requirements of six core competency modules as set out by the European Commission (Appendix I). The re-approval process will not seek to re-assess how the individual meets these criteria. The RPA seeking renewal of his or her approval will be required however, to provide statements, in the form of a table as to how he or she has maintained his or her knowledge of each of the following five out of the original six core competency modules:

- The Basis for Radiation Protection Standards
- Operational Radiation Protection
- Organisation of Radiation Protection
- Radioactive Waste Management
- Transport of radioactive material

The RPII deems that an RPA's understanding of the Basic Knowledge module will not have changed since the original approval, and accordingly does not require the individual to submit statements under this heading. Applicants are reminded that when demonstrating how they have maintained or updated their knowledge of the five core competency modules, each of the 27 sub-topics must be

addressed separately. An example of a suggested layout for some of the sub-topics is shown in Appendix II.

The statements should normally summarise the learning activities, both educational and practical, that the applicant has engaged in since the original granting of approval. The former includes attendance at lectures, meetings, workshops and conferences, as well as self-directed learning, that have a direct bearing on the maintenance of the competencies. For the latter, applicants can refer for example to projects where they have provided advice on specific topics if these demonstrate how they kept their knowledge up to date. Examples of such projects could include performing risk assessments in support of the introduction of new technology or radiological procedures, or providing advice related to new developments associated with new legislation or regulatory requirements.

Continuous professional development

RPA's should be aware of changes in radiation protection philosophy and regulations as these are promulgated and the implication for radiation protection of new medical and dental technologies and procedures, and of changes in such technologies and procedures. For this reason the RPII attaches much importance to the applicant participating in appropriate courses and conferences and other learning based activities, including distance learning and private study, where such issues are covered.

An individual seeking renewal is expected to have accrued at least 20 continuous professional development (cpd) points per calendar year over the five years since initial approval¹. Applicants should indicate the number of points claimed under the various cpd activities as described in Appendix III. The scoring scheme is based on a system developed by the European Federation of Organisations for Medical Physics (EFOMP)².

Applicants may only claim points for those activities relevant to radiation protection activities that fall within the scope of S.I. No. 125 of 2000. In the case of attendance at more general scientific courses or meetings, where topics relating to patient protection or clinical procedures are included, the components dealing with the protection of workers and members of the public, or other matters for which an RPA would be expected to advise on, should be clearly indicated and cpd points only claimed for those components. Applicants are reminded that all points claimed must relate to the role of an RPA and not a Medical Physics Expert.

Furthermore, to ensure that RPA's seeking renewal of approval retain a good knowledge of the principles and practice of radiation protection and are aware of changes in radiation protection philosophy and regulations, at least 10 cpd points

¹ In cases where an RPA has taken a career break or a leave of absence during the five year period, the applicant should demonstrate to the RPII the credit points earned during the period not covered by the career break.

² EFOMP Policy Statement No. 10: Recommended Guidelines on National Schemes for Continuing Professional Development of Medical Physicists. [*Physica Medica* XVII (2001) 97-101].

each year must be from activities where the RPA was the recipient of knowledge or training through attending courses or other educational activities. These correspond to cpd activities 1 and 2 in Appendix III. Applicants should provide a summary of the points claimed for both activities 1 & 2 and activities 3 – 13 for each calendar year. An example of a layout setting out cpd points is provided in Appendix IV.

RPAs seeking renewal of his or her approval must provide titles of all courses, lectures, scientific meetings and other learning based activities for which credit points are being claimed, as well as the number of points claimed. Where the course organiser has issued attendance or credit point certificates to the applicant, copies of these should be provided in support of the points claimed. Where no certificates are available, applicants should provide other evidence of their attendance such as workshop/meeting agendas or meeting minutes. All certificates, programmes, agendas etc should be referenced in the CPD Points Statement.

Re-approval Procedure

Individuals seeking renewal of their RPA approval should submit an application to the RPII at least four weeks prior to the expiry date of their current approval. Four copies of all documentation relating to the application should be forwarded to:

RPA Assessment Committee (Category I)
Radiological Protection Institute of Ireland
3 Clonskeagh Square
Clonskeagh Road
Dublin 14
Ireland

Alternatively, an electronic copy of all documentation can be sent to regulatory@rpii.ie. Applicants must ensure that all documentation is suitably formatted for printing.

Applicants should not submit original copies of attendance or credit point certificates as the RPII is unable to return them. Instead, applicants should submit photocopies or scanned copies of these certificates.

Where the RPII is satisfied that an RPA has maintained and kept their radiation protection knowledge up to date, that individual's RPA approval will be extended for a further five years and a new RPA certificate issued. The names of approved RPAs and the expiry date of their approval will be listed on the RPII's website.

Re-approval fee

The fee associated with making an application for the renewal of an existing RPA's Category I registration for an additional five years is €320. This fee is non-refundable in the event that an application for renewal is unsuccessful.

RPA Corporate Bodies

In the case of Corporate Bodies, the renewal of the RPA approval will be dependent upon the renewal of the RPA approval of the individual(s) within the Body, to whom all RPA advice is traceable.

Corporate Bodies seeking re-approval must provide the following information:

- Evidence that the organisation, which will provide RPA services, is constituted as a recognised legal entity (e.g. a hospital, a company or a partnership).
- The names of individuals within the organisation who are approved as RPAs.
- A document setting out the structure of the management system within the organisation.
- A documented procedure which outlines how any radiation protection advice given externally on behalf of the organisation is traceable to one or more individuals who has/have been individually approved by the RPII as an RPA.

There is no assessment fee for the renewal of a corporate body RPA approval.

Inclusion of Category I RPAs on the Category II RPA Register

With the establishment of the Category II RPA register (industrial and educational sectors) in January 2010, Category I RPAs were considered eligible for appointment to act in the capacity of Category II RPAs, where appropriate, without further assessment. All Category I RPAs were contacted and invited to be included on the Category II Register. Category I RPAs whose names were subsequently included on the Category II register were advised their Category II registration would remain valid until the expiry of their Category I registration and that it would then be subject to revalidation.

While Category I RPAs were not subject to an additional assessment for the purposes of being included on the Category II register it should be noted that there are additional core competency modules for this register. The RPII will now require Category I RPAs, who wish to remain on the Category II register to demonstrate how they meet the requirements of additional core competency modules (Appendix V). RPAs wishing to remain on the Category II register should first apply for re-approval to the Category I register, and if successful they should then apply for approval for the Category II register.

There is no additional assessment fee for approved Category I RPAs applying for inclusion on the Category II register.

Appendix I: Basic Syllabus for the Radiation Protection Adviser (Core Competencies)

1. Basic Knowledge
 - (i) atomic and nuclear physics, interaction of radiation with matter
 - (ii) biology, biological effects of radiation
 - (iii) detection and measurement methods
 - (iv) quantities and units
 - (v) types of sources (nuclear devices/sealed sources, radioactive substances, irradiating apparatus)

2. Basis for Radiation Protection Standards
 - (i) Epidemiology; linear hypothesis; stochastic and deterministic effects
 - (ii) ICRP principles including justification, optimisation, dose limitation
 - (iii) practices and interventions
 - (iv) legal and regulatory requirements including international recommendations/conventions, EU directives and Irish legislation

3. Operational Radiation Protection
 - (i) hazard and risk assessment
 - (ii) minimisation of risk, ALARA
 - (iii) classification of workers
 - (iv) designation of areas and area monitoring
 - (v) personal dosimetry, external and internal
 - (vi) emergency procedures including remedial actions/decontamination
 - (vii) work authorisation
 - (viii) dealing with contractors
 - (ix) communication skills

4. Organisation of Radiation Protection
 - (i) role of Radiation Protection Adviser
 - (ii) role of Radiation Protection Officer
 - (iii) Radiation Safety Committee
 - (iv) safety culture (importance of human behaviour)
 - (v) record keeping (sources, doses, unusual occurrences)
 - (vi) quality control/auditing
 - (vii) Radiation Safety Procedures
 - (viii) Analysis of past incidents including experience feed-back

5. Waste Management

- (i) principles of management and disposal
- (ii) legislation governing disposal
- (iii) critical group concept and dose calculation for critical group
- (iv) control and monitoring of releases

6. Transport

- (i) IAEA transport regulations
- (ii) Carriage of Dangerous Goods legislation

Appendix II – Sample layout for statements demonstrating maintenance of knowledge of core competencies

No	Core Competency	Statements
2. Basis for Radiation Protection Standards		
2 (i)	Epidemiology; linear hypothesis; stochastic & deterministic effects	
2 (ii)	ICRP principles including justification, optimisation & dose limitation	
2 (iii)	Practices and interventions	
2 (iv)	Legal & regulatory requirements including international recommendations, conventions, EU directives & Irish legislation	
3. Operational Radiation Protection		
3 (i)	Hazard & risk assessment	
3 (ii)	Minimisation of risk, ALARA	

Appendix III: Credit Point System

Activity	Details	Points
1	Attendance at pre-assessed courses (i.e. lectures, scientific meetings, workshops, refresher/training courses etc.), national and international	1 cp/h or 2cp/h if examination (which attendee must pass)
2	Attendance at formal local hospital educational activities (e.g., lectures, seminars, regular organised teaching activities)	1 cp/meeting or 1 cp/lecture-hour Max in this category 10 cp/year
3	Planned self-directed learning (e.g., reading of textbooks, journals, including 'distance learning facilities')	Up to 10 cp/year The applicant would be expected to provide titles of the articles or books read or of the distance learning programme as appropriate
4	Special training visits to other departments to study the implications for radiation protection of new technology or a new procedure	Up to 5 cp/one day visit Max in this category 10 cp/year
5	On the job training activities and experiences, e.g., development of interpersonal skills	Up to 10 cp/year
6	Preparation and delivery of formal lecture or seminar	10 cp for first time presentation 2 cp for repeated presentation Max in this category 15 cp/year
7	Organisation of an approved scientific meeting or training course	5cp per meeting or day
8	Publication of a) a paper in a recognized scientific journal b) a textbook c) a chapter in a book	2 to 20 cp 5 to 30 cp 5 cp Max in this category 30 cp/year The number of points claimable would depend on factors such as whether the paper was peer reviewed, the status of the journal or book and the contribution of the author

9	<p>Editor of:</p> <p>a) a recognized scientific journal</p> <p>b) a scientific book</p>	<p>15 cp</p> <p>15 cp</p> <p>Max in this category 30 cp/year</p>
10	<p>Oral or poster presentation at congress</p>	<p>2 to 10 cp per presentation, depending on type of congress (international, national, regional) and authorship (single author, co-author)</p> <p>Max in this category 15 cp/year</p>
11	<p>External examiner for:</p> <p>a) a PhD thesis 15 cp per thesis</p> <p>b) an MSc thesis 10 cp per thesis</p> <p>c) a post-graduate course</p>	<p>15 cp per thesis</p> <p>10 cp per thesis</p> <p>10 cp per year</p> <p>Max in this category 30 cp/year</p>
12	<p>Implementation of new technologies/procedures</p>	<p>Up to 5 cp per activity and 10 cp/yr</p>
13	<p>Active membership of tasks groups (working groups, standardization committees etc.)</p>	<p>Up to 5 cp per membership and per year, depending on type of group (international, national, regional, local) and relevance to radiation protection</p> <p>Max in this category 15 cp/year</p>

Appendix IV: Sample layout for statement of Continuous Professional Development points claimed per calendar year (with sample entries)

Year: _____

CPD Activity	Learning based activity	Date	Supporting evidence	Points claimed
1	Attendance at workshop		CPD certificate (ref 1)	5
1	Attendance at international conference		CPD certificate (ref 2)	7
2	Attendance at professional body seminar		Certificate of attendance (ref 3)	1
			Total points (Activities 1 & 2)	13
3	Journals read			
6	Lecture presented to students		Course programme (ref 4)	2
7	Organiser of training course		Course programme (ref 5)	5
10	Oral presentation at conference		Conference programme (ref 6)	10
13	Member of working group		Meeting minutes showing attendance (ref 7)	5
			Total points (Activities 3 - 13)	22
			Total points	35

Appendix V: Additional Core Competencies for Category I approved RPAs applying for inclusion on the Category II Register

The topics of the Basic Syllabus detail the extent and depth of the knowledge and training required by an RPA. This is based on the requirements for a 'qualified expert' as defined in Article 1 of the Basic Safety Standards Directive 96/29/Euratom. For the Category II register the additional topic areas of General Industry, Research and Training are also included. The depth of knowledge or level of understanding of these additional topic areas is set at Basic Understanding (BU).

Sufficient evidence must be provided to demonstrate that each topic has been covered, to the required depth of knowledge, either:

- (i) in the Applicant's degree, postgraduate study, professional training courses, certificated study or other local training events; and/or
- (ii) as part of the Applicant's work experience. This evidence should be in the form of a resume of the Applicant's work history and should detail the positions held and relevant work experience, clearly highlighting those aspects that demonstrate the necessary knowledge for each relevant topic.

Course outlines, syllabus information, meeting programmes attended or similar items would usually suffice for the evidence in those areas where Basic Understanding is required, provided the evidence is sufficient to demonstrate the necessary knowledge.

Information should be provided as to whether or not performance on the training course(s) was formally assessed. If it was, a brief description of the method(s) of assessment should be provided together with the result(s) achieved by the Applicant.

Additional Topic Areas

General Industry

- (a) Use of sealed sources
 - controlling access, particularly in remote locations
 - transport (e.g. site radiography, mobile sources)
 - inadvertent exposure of non-radiation workers
 - safety culture (proper handling)
 - potential hazards of specific sealed sources
 - practical examples of accidents/misuses that have occurred
- (b) Use of unsealed sources

- hazards of isotope use (including inadvertent use)
- special waste management aspects (including airborne and liquid discharges)
- specific hazards associated with natural radiation

Research and Training

- potential hazards encountered by researcher and teachers
- design of experiments (understanding of)
- hazards of isotope use (including inadvertent use)



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Mission Statement

“To ensure that people in Ireland
are protected from the harmful
effects of radiation.”

Contact us

Radiological Protection Institute of Ireland (RPII)
3 Clonskeagh Square
Dublin 14,
Ireland
Tel: +353 1 2697766
Fax: +353 1 2697437
Email: rpii@rpii.ie
Web: www.rpii.ie