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<u>Criteria for the recognition of Radiation Protection Experts under the Basic Safety Standards for Ionising Radiation Regulations (SL 585.01)</u>

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	Basic Safety Standards for Ionising Radiation Regulations (SL 585.01)			
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Version	Summary of change		
Doc 053-00	Initial version		
Doc 053-01	 Update of document to take into account 2022 amendments to regulation 106 of the BSS Mentioning that the Commission can issue limitations to the RPE certificates in line with Reg 102(3) Mentioning that undertaking should specify the duties of its RPE in line with Reg 105(5) Candidates to provide portfolio of their work and their work experience evaluation is to be against the regulatory functions listed in the BSS regulation 105 In section 3 (Specific Criteria) removal of mention of the degree required. 		
Doc 053-01	Correction to 3.3a to make it consistent with 3.1a and 3.2a		

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1. Overview

The Basic Safety Standards for Ionising Radiation regulations, SL585.01 hence forth referred to as the regulations, requires that each undertaking needs to have access to appropriate radiation protection advice to ensure safety of workers and others. This advice can be sought from the undertaking's appointed Radiation Protection Expert (RPE).

2. References to RPE in the Regulations

2.1. Definition of RPE

The definition of an RPE is given in Regulation 4 of the regulations, as:

"an individual having the knowledge, training and experience needed to give radiation protection advice in order to ensure the effective protection of individuals, and whose competence in this respect is recognised by the Commission;"

2.2. Undertakings obligations with respect to consulting and appointing an RPE

Regulation 43 of the regulations specifies when an RPE shall be consulted by an undertaking:

"Undertakings shall seek advice from a radiation protection expert within the radiation protection expert's areas of competence (as outlined in Regulation 105), on the issues below that are relevant to the practice:

- (a) the examination and testing of protective devices and measuring instruments;
- (b) prior critical review of plans for installations from the point of view of radiation protection;
- (c) the acceptance into service of new or modified radiation sources from the point of view of radiation protection;
- (d) regular checking of the effectiveness of protective devices and techniques;
- (e) regular calibration of measuring instruments and regular checking that they are serviceable and correctly used;
- (f) radiation protection programme of the undertaking."

Regulation 105(5) of the regulations specifies requirements for the appointment of an RPE:

Where a radiation protection expert is consulted pursuant to the requirements of these regulations the undertaking shall appoint that radiation protection expert in writing and shall include in that appointment the scope of the advice which the radiation protection expert is required to give.

2.3. Undertakings obligations with respect to taking the advice from an RPE

Undertakings are required to take into account the advice provided by the RPE, refer to 46(2) and 47(2) of the regulations

2.4. Role of the RPE

The role of an RPE is given in 105 of the regulations as:

- "105. (1) A radiation protection expert is to give competent advice to the undertaking on matters relating to compliance with applicable legal requirements, in respect of occupational and public exposure.
- (2) The advice of the radiation protection expert shall cover, where relevant, but not be limited to, the following:
 - (a) requirements of a radiation protection programme;
 - (b) development of safety culture;
 - (c) optimisation and establishment of appropriate dose constraints;
 - (d) plans for new installations and the acceptance into service of new or modified radiation sources in relation to any engineering controls, design features, safety features and warning devices relevant to radiation protection;
 - (e) categorisation of controlled and supervised areas (f) classification of workers;
 - (g) workplace and individual monitoring programmes and related personal dosimetry;
 - (h) appropriate radiation monitoring instrumentation;
 - (i) quality assurance;
 - (j) environmental monitoring programme;
 - (k) arrangements for radioactive waste management;
 - (l) arrangements for prevention of accidents and incidents;
 - (m) preparedness and response in emergency exposure situations;
 - (n) training and retraining programmes for exposed workers;
 - (o) investigation and analysis of accidents and incidents and appropriate remedial actions;
 - (p) employment conditions for pregnant and breastfeeding workers;
 - (q) preparation of appropriate documentation required under the radiation protection programme such as prior safety assessments and written procedures.
- (3) The radiation protection expert shall, where appropriate, liaise with the medical physics expert.
- (4) The radiation protection expert may be assigned by the undertaking the performance of the tasks of radiation protection of workers and members of the public.
- (5) Where a radiation protection expert is consulted pursuant to the requirements of these regulations the undertaking shall appoint that radiation protection expert in writing and shall include in that appointment the scope of the advice which the radiation protection expert is required to give."

2.5. Role of the Commission

The Commission for the Protection from Ionising and Non-Ionising Radiation (Commission) has the following roles:

- 1. Set criteria for approval of RPEs
- 2. Recognise RPEs by virtue of reg. 102(1)(c) of the regulations

The Commission has decided that the approval validity of RPE certificates shall be that of 5 years.

Further to Regulation 102(3) the Commission may specify limitations in the approval certificate to areas that the applicant has demonstrated experience in

Regulation 102(3) states

"Commission shall issue approval certificates... and approval certificates shall be time limited and may specify limitations"

2.6. Generic Criteria for RPE Certification

The criteria set by virtue of 106 (1) of the regulations is that RPEs for initial certification shall meet the following requirements (Note the original regulation 106(1) was amended by Legal notice 139 of 2022):

- "106. (1) Radiation protection experts need to be recognized by the Commission and will need to meet the following generic criteria:
 - (a) have a degree in radiation protection, physics, engineering, mathematics, radiography or a suitable combination of other qualifications and experience; and
 - (b) sufficient work experience directly concerned with radiation protection practice; and
 - (c) undertake continued professional development.
- (2) The Commission shall issue detailed requirements for different applications based on the generic criteria given in the above.
- (3) Radiation protection experts shall need re-certification by the Commission."

Section 3 of this document gives specific criteria for different applications. The different applications have different levels of risk associated with them and therefore the necessary requirements for certification vary in accordance with the application of the graded approach.

With regard to Regulation 106 (1)(b) candidates are to specify and document in a portfolio their work experience relevant to the Regulation 105(2). The content of the portfolio shall be signed off by a professional who has direct contact knowledge of the work performed by the candidate (for example a departmental head).

3. Specific Criteria for different applications

3.1. Diagnostic and Interventional Radiology

- a) 5 years full time work experience in a radiology department/clinic or academic teaching in radiation protection to at least degree level during the previous 6 years, candidates to specify and document their work experience in the form of a portfolio for activities specified in Regulation 105* and
- b) A total of 150 points of Continuous Professional Development (CPD); see Section 4.2 of this document

3.2. Radiotherapy

- a) 5 years full time work experience in radiotherapy department or academic teaching in radiation protection to at least degree level, during the previous 6 years, candidates to specify and document their work experience in the form of a portfolio for activities specified in Regulation 105* and
- b) A total of 150 points of CPD (see Section 4.2 of this document)

3.3. Nuclear Medicine

- a) 5 years full time work experience in nuclear medicine department or academic teaching in radiation protection to at least degree level during the previous 6 years, candidates to specify and document their work experience in the form of a portfolio for activities specified in Regulation 105* and
- b) A total of 150 points of CPD (see Section 4.2 of this document)

3.4. Dentistry

An approval certificate in 3.1 (Diagnostic and Interventional Radiology),

or

- a) 5 years full time work experience, during the previous 6 years, in dentistry candidates to specify and document their work experience in the form of a portfolio for activities specified in Regulation 105*, and
- b) A total of 120 points of CPD (see Section 4.2 of this document)

3.5. Veterinary Radiography

An approval certificate in 3.1 (Diagnostic and Interventional Radiology),

Of

An approval certificate in 3.6 (Non-Destructive Testing),

3.6. Non-Destructive Testing

- a) 5 years full time work experience, during the previous 6 years, in non destructive testing candidates to specify and document their work experience in the form of a portfolio for activities specified in Regulation 105*, and
- b) A total of 150 points of CPD (see Section 4.2 of this document).

3.7. Fixed Gauges and fixed screening devices, including X-Ray Diffraction

An approval certificate in 3.6 (Non-Destructive Testing),

or

An Approval certificate in 3.8 (Mobile Gauges and mobile screening devices),

- a) 5 years full time work experience, during the previous 6 years, with equipment candidates to specify and document their work experience in the form of a portfolio for activities specified in Regulation 105*, and
- b) A total of 100 points of CPD (see Section 4.2 of this document).

3.8. Mobile Gauges and mobile screening devices

An approval certificate in 3.6 (Non - Destructive Testing),

or

- a) 5 years work experience, during the previous 6 years, with mobile equipment candidates to specify and document their work experience in the form of a portfolio for activities specified in Regulation 105*, and
- b) A total of 130 points of CPD (see Section 4.2 of this document).

3.9. Research

- a) 5 years full time work experience, during the previous 6 years, in the field relevant to the research in either unsealed sources, or sealed/x-ray equipment sources candidates to specify and document their work experience in the form of a portfolio for activities specified in Regulation 105(2)*, and
- b) A total of 150 points of CPD (see Section 4.2of this document).

3.10. Other applications

Criteria to be defined on a case by case basis.

Individuals with other appropriate and equivalent qualifications, work experience and training for any of the above specific applications can be considered on a case by case basis.

- * Experience will be evaluated against the points specified in regulation 105(2) namely
 - (a) requirements of a radiation protection programme;
 - (b) development of safety culture;
 - (c) optimisation and establishment of appropriate dose constraints;
 - (d) plans for new installations and the acceptance into service of new or modified radiation sources in relation to any engineering controls, design features, safety features and warning devices relevant to radiation protection;
 - (e) categorisation of controlled and supervised areas
 - (f) classification of workers;
 - (g) workplace and individual monitoring programmes and related personal dosimetry;
 - (h) appropriate radiation monitoring instrumentation;
 - (i) quality assurance;
 - (j) environmental monitoring programme;
 - (k) arrangements for radioactive waste management;
 - (1) arrangements for prevention of accidents and incidents;
 - (m) preparedness and response in emergency exposure situations;
 - (n) training and retraining programmes for exposed workers;
 - (o) investigation and analysis of accidents and incidents and appropriate remedial actions;
 - (p) employment conditions for pregnant and breastfeeding workers;
 - (q) preparation of appropriate documentation required under the radiation protection programme such as prior safety assessments and written procedures.

The content of the portfolio shall be signed off by a professional who has direct contact knowledge of the work performed by the candidate (for example a departmental head).

Limitations in the certificate may be limited to areas that the application demonstrated experience. The content of the portfolio shall be signed off by a professional who has direct contact knowledge of the work performed by the candidate (for example a departmental head).

4. Applying for initial or reapproval of RPE status

RPEs will be recognised in one or more of the different applications listed in section 3.

Further administrative details of the application process will be elaborated by the Commission.

An application fee of 150 euro (non-refundable) will be charged by the Commission per application received. There is an additional non-refundable fee of 30 euro for each additional criteria.

The Commission shall process applications within 2 months. In the event that certification (or re-certification) is refused the Commission shall state which criteria are not met.

4.1. General Application procedure

All applications, either for initial or renewal of RPE status shall, along with the completed application form, provide:

- 1 Copy of the required academic qualification or its equivalent
- 2 Evidence of five years documented full time work experience in the last 6 years
- 3 Evidence of the required number of points documented CPD as per Section 4.2
- 4 Application fee (non-refundable)

4.1.1. Re-approval application

Re-approval submission date should be at least two months prior to the expiry date.

4.1.2. Candidates with existing RPE status from other EU states

The Commission will consider RPE status awarded by other EU States to persons who wish to be approved by the Commission to have RPE status in Malta.

4.2 Continuous Professional Development points system

The Continuous Professional development (CPD) system is designed in order that candidates can demonstrate that they have:

- a) the knowledge and understanding of fundamental principles of radiation protection, and
- b) the knowledge of operational radiation protection methods, and
- c) the ability to develop and provide appropriate advice in relation to topics on which the RPE is expected to provide advice.

With regards to CPD, applicants must be able to demonstrate having a combination of activities taken from the following three Categories as shown in the below tables.

Minimum of 10% of required total from Category 1 (Regulatory Learning Activities)
Minimum of 20% of required total from Category 2 (General Learning Activities)
Minimum of 50% of required total from Category 3 (Practice Activities)

An RPE with an approval in one particular practice area who wishes approval(s) in additional practice areas can use the CPD points acquired for his/her granted approval area towards additional practice area(s). Similarly, an individual applying for multi practice areas, will only need the number of points of that practice area that carries the maximum number of CPD points.

The CPD points system for RPEs is shown in the below tables

RPE Regulatory Learning Activities (Category 1)				
Ref	Activity (Carried out within the last 5 years)	Max Pts per year	Max Pts per 5 years	Minimum % of total Points in 5 years
1.1	Attending a national meeting on radiation protection legislation in Malta, Such meetings be notified to the Commission 2 points per hour	8	20	10%

Table 1: RPE Regulatory Learning Activities (Category 1)

RPE General Learning activities (Category 2)				
Ref	Activity (Carried out within the last 5 years)	Max Pts per year	Max Pts per 5 years	Minimum % of total Points in 5 years
2.1	Attendance at international, radiological meeting 2 point per hour	15	25	
2.2	Attendance at, national radiological meetings of professional societies 1 point per hour	4	10	
2.3	Attending a radiation related course/workshop organised within an undertaking 0.5 point per hour	4	10	
2.4	Online virtual real-time radiation related meeting or presentation 0.5 point per hour	4	10	
2.5	Planned self-directed radiation related learning, e.g computer-based e-learning. 2 point per topic	2	10	20%
2.6	Visits to overseas departments for special training 4 point per day	12	20	2070
2.7	Membership of radiation protection related body, committee, working group or official sub-committees 2 points per year	2	10	
2.8	Formal non-radiation safety related on the job training activities and experiences, e.g. development of interpersonal skills, time management etc. 1 point per topic	2	10	

Table 2: RPE General Learning Activities (Category 2)

RPE Practice Activities (Category 3)				
Ref	Activity (Carried out within the last 5 years)	Max Pts per year	Max Pts per 5 years	Minimum % of total Points in 5 years
3.1	Documented advice to undertaking on regulatory obligations not related to medical exposures 2 points per documented activity	4	20	j
3.2	Development of Radiation safety programme 10 point per complete radiation safety programme developed 2 points per documented activity contribution	10	30	
3.3	Documented example of the development of safety culture within an organisation 2 points per documented activity	4	12	
3.4	Documented example of optimisation of the radiation protection 2 points per documented activity	8	24	
3.5	Documented design of new facilities. 4 points per facility	4	12	
3.6	Workplace, environmental and individual monitoring 2 points per documented advice/analysis of results	4	12	
3.7	Waste management 2 points per documented advice	4	12	50%
3.8	Direct responsibility of Radiation Protection at a facility 4 point per assignment of responsibility.	8	24	
3.9	Performing RP Risk Assessment per practice area 2 point per initial risk assessment 1 point per adapting existing risk assessment	4	20	
3.10	Performing a RP Safety Audit 5 point per Safety Audit	10	20	
3.11	Emergency response preparations 2 points per documented activity	4	15	
3.12	Accident and incident investigation. 4 points per investigation	8	20	
3.13	Training of exposed workers. 1 point per contact hour	4	20	
3.14	Supervision and mentoring of staff 2 points per 8 contact hours with 1 or more staff member(s)	6	18	
3.15	Preparation and delivery of formal lectures or seminars, first presentation 4 points per development and delivery of 1 hour lecture	8	16	
3.16	Repeat delivery of formal lectures or seminars. 0.5 points per hour of repeat delivery	2	10	
3.17	Publication of an RP related paper in a recognised scientific journal Lead author=50 pts Co-author= 50pts/number of authors	50	50	
3.18	Oral or poster presentation on a radiation protection 10 points for oral presentation at international event 5 points for poster presentation at international event 5 points for oral presentation at national event 2 points for poster presentation at national event	10	30	

Table 3: RPE Practice Activities (Category 3)

CPD Transitional provisions

A reduced number of CPD (refer to 4.2) points are indicated in the below table.

When applicant applies	Period of CPD pts to be collected in	Minimum Percentage points needed in each of the three categories
25-Oct-21 to 24-Oct-23	2 years prior to application	50%
25-Oct-23 to 24-Oct-24	3 years prior to application	60%
25-Oct-24 to 24-Oct-25	4 years prior to application	60%
25-Oct-25 to 24-Oct-26	5 years prior to application	80%
Post 25-Oct-26	5 years prior to application	100%

5. RPE Register

All new applicants will have their name and their RPE recognition area(s) included in a publicly available list maintained by the Commission.