

Terms of Reference of the EFOMP Examination Board

Background

The recognition of the Medical Physics profession by the European Union (EU) can be achieved by meeting the requirements of the EU Directive 2005/36/EC on the recognition of professional qualifications as amended by Directive 2013/55/EU of the European Parliament and of the Council of 20 November 2013 [1].

Chapter IIIA of Directive 2013/55/EU (reproduced in Appendix A, for easy reference) offers recognition when at least a third of the EU Member States (MS) agree on a common training framework and a common training test.

EFOMP is in the process of updating its Policy Statement No. 6 "Recommended Guidelines on National Registration Schemes for Medical Physicists" [2] in accordance to paragraph 2 of article 49a of Chapter IIIA of Directive 2013/55/EU, so that the national registration schemes of the EFOMP National Member Organisations (NMOs) have sufficient commonality to be seen as constituting a common training framework.

The EFOMP Examination Board (EEB) is set up in accordance with paragraph 2 of article 49b of Chapter IIIA of Directive 2013/55/EU in order to assist NMOs to agree on a common training test by certifying that a medical physicist has reached the competence level to act independently. This will be recognised by the award of a diploma.

It is to be understood that in the European context, the title "medical physicist" (MP) is only to be used for individuals that have the training and education in compliance with the requirements in the European Commission's Radiation Protection Report 174 (RP 174) [3] for the medical physics disciplines that use ionising radiation (i.e. they are qualified to Master's degree level and have at least 2 years equivalent accredited clinical training in the field of medical physics). For these disciplines, the common training test is based on RP 174.

Additionally the EEB will provide an attestation certificate to those MPs that have reached the Medical Physics Expert (MPE) level to be recognised by the relevant competent authorities of the EU MS, according to the EU Directive 2013/59/EURATOM laying down the basic safety standards for protection against the dangers arising from exposure to ionising radiation (EU BSS) [4].

Introduction

In many of EFOMP's NMOs a local examination board has not been established. Currently medical physicists from such countries face difficulties in providing the necessary qualification evidence when they seek employment in other EU MS.

In order to facilitate the harmonization of medical physics standards throughout Europe, so facilitating the mobility of medical physicists, the EEB has been established. It is not the intention of the EEB to compete with any national examination board, although a harmonisation towards a common training test is encouraged thus fulfilling the requirements of paragraph 2 of article 49b of Chapter IIIA of Directive 2013/55/EU [1].

EFOMP and the three main clinical societies concerned with the application of radiation to medicine, namely the European Society of Therapeutic Radiation Oncology (ESTRO), the European Society of Radiology (ESR) and the European Association of Nuclear Medicine (EANM) have agreed on the syllabi for the training and education of medical physicists [5, 6, and 7].

In parallel, the European Commission (EC) has published RP 174 which specifies the requirements for an individual to be recognised as an MPE by the relevant national competent authorities as specified by the EU BSS [4].

The combination of European wide standards for training and education, and European wide recognition of the knowledge, skills and competence required to work as an MP means that, for the first time, it is feasible to have a European wide standard examination to test these criteria.

Therefore the EEB will award a European Diploma of Medical Physics (EDMP) as recognition that the holder is qualified to Master's degree level and has at least 2 years equivalent clinical training in the field of medical physics. It will also examine candidates against the criteria set by RP 174 and award the European Attestation Certificate to those who have reached the level of the Medical Physics Expert (EACMPE).

The EEB is also dedicated to improving and expanding its Diploma and Certificate to other disciplines of Medical Physics such as MRI and Non-Ionising radiation.

Membership of the EEB

The membership of the EEB is made up of seven (7) individual MPEs appointed by the EFOMP Board of Directors, to include at least two from each of the three main disciplines (radiotherapy, nuclear medicine and diagnostic & interventional radiology). The EEB will be directly responsible to the EFOMP Board of Directors.

Appointment procedure

Nominations should be submitted to the EFOMP Secretary-General within two months from the call for nominations and should consist of:

- A formal letter of nomination by the President of the EFOMP NMO that will include the name and affiliation of the candidate
- a letter from the candidate accepting his/her nomination
- a statement (up to 500 words) by the candidate demonstrating the knowledge and interest in the field and highlighting any other experience which makes them suitable for the post
- a short CV limited to 3 pages A4. The CV should cover the candidate's qualifications

The EFOMP Secretary-General will scrutinise the nominations to ensure that the supporting paperwork is in order and that those nominated are willing and eligible to stand.

The EFOMP Board of Directors will select from the available nominations and appoint the EEB members for a three year term of office. The EFOMP Board of Directors may appoint others as members of the EEB if the available nominees do not meet the accepted standards.

Operating Procedure

The Board will elect its Chair from amongst its members. The length of office of the chair will be 3 years and shall run from the time of appointment to the office. The term of office of the EEB members will normally be 3 years. The EFOMP Secretary General will be the non-voting secretary to the EEB. The EFOMP Treasurer will be the non-voting Treasurer to the EEB.

The EEB is responsible for:

1. the issue and review of operating procedures;
2. monitoring and reviewing the operation of the scheme;
3. the setting of assessments
4. appointing a pool of suitably qualified persons to assess and adjudicate on applications for the EDMP and EACMPE;
5. appointing a panel to investigate appeals and deciding the outcome of these appeals;
6. maintaining a register of all holders of EDMP and EACMPE and associated records;
7. financial control including the setting of fees. It is intended that the whole examination process, including interviews, be self-funding;
8. submitting an annual report to the EFOMP Board.

Examination requirements

1. Eligibility Criteria for the EDMP

The examination is open to medical physicists and medical physics residents/trainees after their second year of clinical training. The EEB will announce the date and venue of the next examination, at least six months in advance. Possible candidates must submit to the EEB the required documentation at least three months before the examination so that the EEB can judge their suitability and accept them for the examination.

Eligibility criteria:

- Candidates must have at least completed their second year of medical physics training at the time of the examination.
- Candidates must have received this training in one of the recognised sub-disciplines of medical physics. These sub-disciplines and their associated criteria for knowledge, skills and competences will be set from time to time by the EEB. Candidates who have trained in more than one sub-discipline must contact the EEB to check their eligibility.
- Active membership of the relevant national medical physics society in the year of the examination is required.

Documentation required

- Proof of academic qualification, e.g. MSc, PhD, etc.
- Proof of clinical training indicating the duration of medical physics training and expected date of completion (if not yet complete) signed by the training institution.
- Proof of active membership of the relevant national medical physics society.
- For candidates with less than two years of clinical training only: proof of experience as a supervised medical physicist is required.

Examination Structure

The knowledge base for the examination is as laid out in the EFOMP training curriculum for the respective discipline for which the candidate wishes to sit his/her examination. The form of assessment will be decided by the EEB.

Language

All parts of the examination will be held in English but non-native language skills will be taken into consideration by the examiners.

2. Eligibility Criteria and Examination process for the EACMPE

Candidates will email the EEB indicating that they wish to be assessed by EEB as having the knowledge, skills and competences required of the Medical Physics Expert (MPE) in a specific domain (radiotherapy, nuclear medicine, radiology, etc) and providing the following information:

- Speciality in which they are working, i.e. radiotherapy, nuclear medicine or diagnostic & interventional radiology.
- CV
- List of publications
- Certificates supporting attendance at courses/conferences
- Evidence of carrying out CPD mapped to standards set out in EC RP 174, Annex I

On receipt of the information the EEB will select two (2) assessors.

The written information is passed to the assessors who would respond within two weeks indicating if there was sufficient evidence to proceed to an oral assessment.

If the assessment can proceed then the EEB will ensure that arrangements are made for the date and location of the interview. Only in exceptional circumstances will the interview be carried out by telephone/teleconference.

Following the interview the assessors will send their report to the EEB, who will normally accept the recommendation of the assessors.

In the case of the candidates being approved as having the knowledge, skills and competences required of an MPE the EEB will inform the candidate and a certificate will be issued.

In the case of either rejection, or additional work/experience being required, the EEB will forward the report to the candidate also informing the candidate of his/her right to appeal.

The Interview

- The interview will normally last for at least one hour.
- The assessors may ask any such questions as he/she deems necessary to make the assessment.
- The assessors will judge the suitability of the candidate for certification as an MPE against the standards set out in RP 174, Annexe I Inventory of Learning Outcomes for the MPE in Europe.
- At the end of the interview the assessors should not divulge the outcome to the candidate.
- The assessors will produce a written report advising the EEB whether the candidate meets the standards expected of an MPE. This should contain sufficient detail to allow the EEB to make a judgement on whether or not to support the recommendation. The report will have three options (1) the candidate has met the standard, (2) the candidate needs to carry out additional work/experience and present that evidence to EEB within a timescale not exceeding 12 months. Only in exceptional circumstances would a second oral assessment be carried out, (3) the candidate does not meet the required standard.
- In the event of the assessors being unable to reach agreement then each assessor should submit his/her own report to the EEB. The EEB will make the final decision.

Assessors

- Assessors should, in the judgement of the EEB have been working at the level of MPE for at least 5 years.
- Assessors should be members of an EFOMP NMO.
- There will be a minimum of 12 members and membership shall be for renewable periods of three years.
- Assessors must be willing to travel to carry out the assessment. Associated costs, such as travel and accommodation expenses will be met from the fees charged by EEB,
- For each application the EEB Secretary shall be responsible for selecting a panel (the Assessment Panel) of at least two suitably experienced Assessors to adjudicate on the application and award or refuse certification as they consider appropriate.

3. Appeal Procedure

- In the case of the candidate not being successful, he/she may appeal against the decision of the EEB.
- The grounds for the appeal should be set out in a letter addressed to the EEB. An appeal can only be made against the assessment process, not against the professional judgement of the assessors or the examiners.

- The EEB will appoint a Panel of Enquiry of at least three assessors to investigate the appeal excluding any assessors or any examiner who have already been involved in the assessment or examination. The Panel will submit its report to the EEB who will decide the outcome of the appeal.
- The candidate will be informed of the outcome of the appeal within 4 working weeks of receipt of the appeal document.
- The EEB's decision is final.

References

- [1] Parliament and Council Directive 2013/55/EU. Official Journal of the European Union, L 354 (2013)
- [2] EFOMP Policy Statement 6: "Recommended guidelines of National Registration Schemes for Medical Physicists", *Physica Medica* XI(4), 1995, 157-159
- [3] Guidelines on Medical Physics Expert. European Commission. Radiation Protection 174, (2014)
- [4] Council Directive 2013/59/EURATOM. Official Journal of the European Union, L 013, (2014)
- [5] ESTRO – EFOMP "Core curriculum for Medical Physicists in Radiotherapy", revised edition, February 2011 (http://www.estro.org/binaries/content/assets/estro/school/european-curricula/2nd-finalised-edition-european-cc-physics_16-02-2011.pdf).
- [6] ESR – EFOMP "Core curriculum for Medical Physicists in Radiology", recommendations from an EFOMP/ESR Working Group, 2011 (https://www.myesr.org/html/img/pool/CC_radiology_physics_JUN_2011.pdf).
- [7] EANM – EFOMP "Curriculum for education and training of Medical Physicists in Nuclear Medicine", recommendations from the EANM Physics Committee, the EANM Dosimetry Committee and EFOMP, *Physica Medica*, 2013, 29, 139-162, ([http://www.physicamedica.com/article/S1120-1797\(12\)00063-4/pdf](http://www.physicamedica.com/article/S1120-1797(12)00063-4/pdf)).

Appendix A: Extract from Directive 2013/55/EU of the European parliament and of the Council of 20 November 2013 amending Directive 2005/36/EC on the recognition of professional qualifications and Regulation (EU) No 1024/2012 on administrative cooperation through the Internal Market Information System ('the MI Regulation')

"Chapter IIIA

Automatic recognition on the basis of common training principles

Article 49a

Common training framework

1. *For the purpose of this Article, 'common training framework' means a common set of minimum knowledge, skills and competences necessary for the pursuit of a specific profession. A common training framework shall not replace national training programmes unless a Member State decides otherwise under national law. For the purpose of access to and pursuit of a profession in Member States which regulate that profession, a Member State shall give evidence of professional qualifications acquired on the basis of such a framework the same effect in its territory as the evidence of formal qualifications which it itself issues, on condition that such framework fulfils the conditions laid down in paragraph 2.*
2. *A common training framework shall comply with the following conditions:*
 - (a) *the common training framework enables more professionals to move across Member States;*
 - (b) *the profession to which the common training framework applies is regulated, or the education and training leading to the profession is regulated in at least one third of the Member States;*
 - (c) *the common set of knowledge, skills and competences combines the knowledge, skills and competences required in the systems of education and training applicable in at least one third of the Member States; it shall be irrelevant whether the knowledge, skills and competences have been acquired as part of a general training course at a university or higher education institution or as part of a vocational training course;*
 - (d) *the common training framework shall be based on levels of the EQF, as defined in Annex II of the Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning ⁽¹⁾;*
 - (e) *the profession concerned is neither covered by another common training framework nor subject to automatic recognition under Chapter III of Title III;*
 - (f) *the common training framework has been prepared following a transparent due process, including the relevant stakeholders from Member States where the profession is not regulated;*
 - (g) *the common training framework permits nationals from any Member State to be eligible for acquiring the professional qualification under such framework without first being required to be a member of any professional organisation or to be registered with such organisation.*
3. *Representative professional organisations at Union level, as well as national professional organisations or competent authorities from at least one third of the Member States, may submit to the Commission suggestions for common training frameworks which meet the conditions laid down in paragraph 2.*
4. *The Commission shall be empowered to adopt delegated acts in accordance with Article 57c to establish a common training framework for a given profession based on the conditions laid down in paragraph 2 of this Article.*
5. *A Member State shall be exempted from the obligation of introducing the common training framework referred to in paragraph 4 on its territory and from the obligation of granting automatic recognition to the professional qualifications acquired under that common training framework if one of the following conditions is fulfilled:*
 - (a) *there are no education or training institutions available in its territory to offer such training for the profession concerned;*
 - (b) *the introduction of the common training framework would adversely affect the organisation of its system of education and professional training;*
 - (c) *there are substantial differences between the common training framework and the training required in its territory, which entail serious risks for public policy, public security, public health or for the safety of the service recipients or the protection of the environment.*
6. *Member States shall, within six months of the entry into force of the delegated act referred to in paragraph 4, notify to the Commission and to the other Member States:*

¹OJ C 111, 6.5.2008, p. 1

- (a) *the national qualifications, and where applicable the national professional titles, that comply with the common training framework; or*
- (b) *any use of the exemption referred to in paragraph 5, along with a justification of which conditions under that paragraph were fulfilled. The Commission may, within three months, request further clarification if it considers that a Member State has provided no or insufficient justification that one of these conditions has been fulfilled. The Member State shall reply within three months of any such request.*

The Commission may adopt an implementing act to list the national professional qualifications and national professional titles benefiting from automatic recognition under the common training framework adopted in accordance with paragraph 4.

- 7. *This Article also applies to specialties of a profession, provided such specialties concern professional activities the access to and the pursuit of which are regulated in Member States, where the profession is already subject to automatic recognition under Chapter III of Title III, but not the specialty concerned.*

Article 49b

Common training tests

- 1. *For the purpose of this Article, a 'common training test' means a standardised aptitude test available across participating Member States and reserved to holders of a particular professional qualification. Passing such a test in a Member State shall entitle the holder of a particular professional qualification to pursue the profession in any host Member State concerned under the same conditions as the holders of professional qualifications acquired in that Member State.*
- 2. *The common training test shall comply with the following conditions:*
 - (a) *the common training test enables more professionals to move across Member States;*
 - (b) *the profession to which the common training test applies is regulated, or the education and training leading to the profession concerned is regulated in at least one third of the Member States;*
 - (c) *the common training test has been prepared following a transparent due process, including the relevant stakeholders from Member States where the profession is not regulated;*
 - (d) *the common training test permits nationals from any Member State to participate in such a test and in the practical organisation of such tests in Member States without first being required to be a member of any professional organisation or to be registered with such organisation.*
- 3. *Representative professional organisations at Union level, as well as national professional organisations or competent authorities from at least one third of the Member States, may submit to the Commission suggestions for common training tests which meet the conditions laid down in paragraph 2.*
- 4. *The Commission shall be empowered to adopt delegated acts in accordance with Article 57c to establish the contents of a common training test, and the conditions required for taking and passing the test.*
- 5. *A Member State shall be exempted from the obligation of organising the common training test referred to in paragraph 4 on its territory and from the obligation of granting automatic recognition to professionals who have passed the common training test if one of the following conditions is fulfilled:*
 - (a) *the profession concerned is not regulated on its territory;*
 - (b) *the contents of the common training test will not sufficiently mitigate serious risks for public health or the safety of the service recipients, which are relevant on its territory;*
 - (c) *the contents of the common training test would render access to the profession significantly less attractive compared to national requirements.*
- 6. *Member States shall, within six months of the entry into force of the delegated act referred to in paragraph 4, notify to the Commission and to the other Member States:*
 - (a) *the available capacity for organising such tests; or*
 - (b) *any use of the exemption referred to in paragraph 5, along with the justification of which conditions under that paragraph were fulfilled. The Commission may, within three months, request further clarification, if it considers that a Member State has provided no or insufficient justification that one of these conditions has been fulfilled. The Member State shall reply within three months of any such request.*

The Commission may adopt an implementing act to list the Member States in which the common training tests adopted in accordance with paragraph 4 are to be organised, the frequency during a calendar year and other arrangements necessary for organising common training tests across Member State.