



**EUROPEAN BOARD FOR ACCREDITATION  
IN MEDICAL PHYSICS  
(EBAMP)**

**Quality Manual**

Dec. 2016

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## **Abbreviations and Acronyms**

CPD	Continuous Professional Development
CQMP	Clinically Qualified Medical Physicist
EBAMP	European Board for Accreditation in Medical Physics
EC	European Commission
ECTS	European Credit Transfer and accumulation System
ECVET	European Credit system for Vocational Education and Training
EFOMP	European Federation of Organisations for Medical Physics
EQF	European Qualifications Framework
EU BSS	European Union Basic Safety Standards
KSC	Knowledge, Skills, Competence
LLL	Life Long Learning
LO	Learning Outcome
MPE	Medical Physics Expert
NMO	National Member organisation
QMP	Qualified Medical Physicist
QMS	Quality Management System

## **List of Forms**

The forms listed below are available as separate files for ease of use and updating.

EB001 Code of Conduct and register of interests

EB002a Application Form for Congresses, Conferences, Workshops or Seminars only.

EB002b Application Form for Courses only.

EB003a Assessment Report Form for Congresses, Conferences, Workshops or Seminars only.

EB003b Assessment Report Form for Courses only.

EB004 Letter of Certification

## 1. Introduction

There is a strong demand for new education and training courses in medical physics following the publication of the European Commission (EC) Guidelines on Medical Physics Expert (MPE) report No. 174 [1] and the European Union Basic Safety Standards Directive 2013/59/EURATOM (EU BSS) [2], as well as the rapid development of medical techniques based on ionising radiation, growth of hospitals and the continuous need to produce competent health professionals in medical physics. Additionally, external assessment of the quality of education or training provision is needed [3].

To satisfy this demand, the European Federation of Organisations for Medical Physics (EFOMP), at its Athens Council meeting held on the 13<sup>th</sup> of September 2014, has decided to set up an independent European Board for Accreditation in Medical Physics (EBAMP).

The terms of reference and other related procedures are presented in this document, the European Accreditation Board's Quality Manual.

## 2. Definitions and Requirements

It is important to have a common understanding of the main three terms used in this area (Accreditation, Recognition and Certification). While they are often used interchangeably in fact they are three distinct terms with specific meanings:

**Accreditation:** is a process by which a recognised body assesses and recognises that the education and/or training provided by an institution meets acceptable levels of quality. Therefore there are two parties involved in this process: the institution that provides education and training and an external organisation which performs the external assessment and awards accreditation as a result of positive evaluation.

**Recognition:** is a process by which a national authority recognises the professional equivalence of foreign higher education diplomas or other evidence of formal qualification awarded upon the completion of a course at a higher education or training institution.

**Certification:** is a process that recognises an individual professional who has demonstrated special knowledge and expertise and has successfully completed the education or training provided by an accredited organisation.

Certified medical physicists bring important benefits to their patients and themselves. Because of their special education and training, certified medical physicists demonstrate knowledge and competence, enabling them to justify and optimise procedures and provide better patient care.

To make medical physics more understandable to decision makers and management of healthcare institutions and provide direction for role holders, a mission statement has been formulated based mainly on the relevant articles of the EU BSS [1]. The mission statement is the following:

"Medical Physicists (QMPs, CQMPs and MPEs<sup>1</sup>) will contribute to maintaining and improving the quality, safety and cost-effectiveness of healthcare services through patient-oriented activities requiring expert action, involvement or advice. This activity includes the specification, selection, acceptance testing, commissioning, quality assurance/control and optimised clinical use of medical devices (e.g., radiological devices, physiological measurement devices) and assessing and managing patient risks from associated physical agents (e.g., ionising radiation, strong electromagnetic static and RF fields, ultrasound, optical radiation, vibration). The work will include protection from such agents, installation design and surveillance, and the prevention of unintended or accidental exposures to such physical agents. All activities will be based on current best evidence or own scientific research when the available evidence is not sufficient. The scope includes risks to volunteers in biomedical research and carers and comforters".

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<sup>1</sup> QMP stands for Qualified Medical Physicist, CQMP stands for Clinically Qualified Medical Physicist and MPE stands for Medical Physics Expert.

Accreditation should be based upon established standards and guidelines [3]. The minimum requirements for accreditation of a training programme should take into account aspects related to admission policy, facilities, staff, certification programmes, educational material, teaching methods, administration and archives, course updates and course evaluation. Training should be provided in clinical facilities. Hands-on training is essential as it provides real world experience by allowing the trainee to carry out measurements and understand the underlying techniques. All staff should possess appropriate qualifications and experience in their particular field.

Education providers should have the knowledge and skills in the procedures carried out by the healthcare professionals involved in the training activity in order to plan and provide effective education and training [4]. Training in medical physics is very challenging taking into consideration the rapid technological developments and the complex science involved in modern imaging and therapeutic procedures. For this reason, the development of 'train the trainer' schemes is of crucial importance to provide the best possible opportunities to professionals involved in medical physics training.

Scientific programme content and educational material should be reviewed periodically to ensure that they remain up-to-date. Course evaluation is usually performed at the end of a course or semester using a questionnaire. Course participants answer questions related to several aspects of the educational process such as educational material, course duration and teaching effectiveness.

Certification is usually based on examinations. Several evaluation methods can be considered to examine knowledge in medical physics including written examinations, oral examinations and research projects. Recertification programmes ensure that certified professionals maintain, develop or improve their Knowledge, Skills and Competence (KSC) in the area of medical physics that they are certified. It is noted here that certification is outside the scope of the EBAMP.

There are several initiatives and tools developed by the EC to facilitate the accreditation, certification, validation and recognition of knowledge as well as to promote the mobility of students, educators and researchers. The European Qualifications Framework (EQF) for Lifelong Learning (LLL) [5] is a tool based on Learning Outcomes (LOs) and aims to relate national qualifications frameworks to a common European reference framework [6]. The European Credit Transfer and accumulation System (ECTS) is a grading system developed to facilitate the transfer of students [7]. One year of a study programme is equivalent to 60 credits [8]. ECTS is compatible with the EQF and can help medical physics schools to implement Quality Assurance procedures. The European Credit system for Vocational Education and Training (ECVET) is a system for credit accumulation and transfer for vocational education and training [9]. The ECVET credit system allows individuals to obtain a vocational certificate by obtaining units at the most appropriate pace. A difference between the ECTS and the ECVET credit system is that the ECVET credit system is based on LOs, whereas ECTS is based on time spent on an educational activity.

Medical physics education and training events must be accredited by an external, independent accreditation body. In accordance with the EQF, the guidelines presented in the EC guidelines on the Medical Physics Expert [1] list the required LOs in terms of KSC in table format and should be utilised for ionising radiation related education and training events. Information is provided separately for each medical physics specialty involving ionising radiation. This information can be used by accreditation bodies to evaluate the content of education and training programmes in medical physics offered by organisations such as professional and scientific societies, etc. ECTS can be used not only for the main higher education degrees, but also for LLL activities.

Other relevant definitions are given in Appendix A.

### 3. Quality Management System

The operation of the EBAMP will be in accordance to its quality management system as described in this document, its Quality Manual.

#### 3.1 Scope

The EBAMP will accredit medical physics education and training events. Initially its work will be limited to allocating CPD credits depending on the number of hours of education and hands-on training required of participants and quality criteria. The accreditation of degree courses is excluded from consideration in this document but it is expected that EBAMP will work to develop appropriate policies and protocols to do this.

#### 3.2 Quality Policy

The EBAMP is committed to document, implement and maintain a quality management system and continually improve its effectiveness in order to assure a quality service to education and training providers.

#### 3.3 Organisational Structure

The work of EBAMP will be carried out by its Board. The composition, qualifications and ethical conduct of the Board of the EBAMP are described below.

Each EFOMP NMO will be entitled to designate a senior member of the NMO as the liaison person with the Board. This person will be entitled to:

- receive all communications from the Board on behalf of the NMO
- to vote for new Board members (see section 3.3.4)
- to represent the NMO at any meeting called by the Board

The NMO may replace its liaison person at any time by informing the Board Secretary-General in writing.

##### 3.3.1 Board Composition

The EBAMP will consist of nine prominent Medical Physicists with expertise in the education and training of medical physicists as well as in medical physics professional matters.

The Board will consist of its President, Vice President /Past President, Secretary General, Treasurer (known as the officers) and five ordinary members. The post of Past President will normally be filled by the Immediate Past President for the two years following the end of the President's term of office.

The term of office of the members of the Board are:

Board members	Normal term of Office, years	First term of Office, years
President	3	2
Vice-President/Past President	1 and 2 respectively	2 (there will be no Past President)
Treasurer	3	3
Secretary-General	3	3
Ordinary members	3	3 (two for 2 years)

For the first Board only, board positions will be advertised and the candidates will be evaluated by the EFOMP Board of Directors and their appointment will be ratified by the EFOMP Council. Thereafter the EBAMP will function fully independently from EFOMP.

For the first term of Office, the EFOMP Council will elect a President for a two (2) years term of Office and two (2) Ordinary members for a two (2) years term of Office. It will also elect the Treasurer, Secretary General and three (3) ordinary members for the normal term of Office.

The Treasurer, Secretary General and the Ordinary Members cannot hold more than two consecutive terms of Office.

### **3.3.2 Board Member Qualifications**

Persons being considered for appointment as Board members are required to submit a CV to the Board to demonstrate that they meet the following criteria:

- a minimum of 10 years' experience in a senior position in medical physics, normally as an MPE
- a position which entails (or has in the past entailed) appraisal and management of the performance of individuals engaged in medical physics
- experience of teaching in medical physics at postgraduate level (EQF level 7 and/or 8)
- academic qualifications and experience in medical physics equivalent to EQF level 8
- membership of a European NMO of EFOMP

### **3.3.3 Ethical conduct**

#### **3.3.3.1. Introduction**

The Board is asked to agree to a Code of Conduct for Board members and Officers and to the introduction of a register of interests.

The purpose of the register is to place on record potential conflicts of interest. In addition, the Code of Conduct asks Board members and Officers to declare any relevant interests in the course of EBAMP business.

The register of interests must be accessible to members of the public upon request to the Secretary-General.

#### **3.3.3.2. Code of Conduct for Board Members and Officers**

Membership of the EBAMP Board carries with it the responsibilities of upholding the aims of the EBAMP. In order that both the public and NMOs may have confidence in the effectiveness and impartiality of the Board, members undertake:

- to make themselves available for service on the Board and those of its committees and working parties to which they may be elected or appointed
- to take decisions in EBAMP's interest without favour to any individual body corporate or other association
- to avoid placing themselves under obligation to any individual or organisation which might affect their ability to act impartially and objectively as members of the EBAMP Board
- to declare in the EBAMP register of interests their membership of other bodies or organisations in accordance with the Board's guidance on this matter
- to declare relevant interests or prior knowledge in the course of the EBAMP business, and/or to take steps to avoid such interests or knowledge giving rise to a conflict of interest
- to serve without seeking personal gain or preferment

- to avoid bias on grounds of race, disability, lifestyle, culture, beliefs, colour, gender, sexuality or age
- to be open about the decisions and actions they take as EBAMP Board members, restricting information only when the principles of confidentiality or law demand it
- to observe the confidentiality of information identified as confidential which they receive as a privilege of Board membership
- to distinguish clearly, when speaking or writing, between personal views and those of the EBAMP Board
- to support the above principles by leadership and example
- Members and Officers are expected to avoid any conflict of interest arising out of their association with EBAMP and their association with any organisations, individuals or suppliers connected with EBAMP
- They are expected to abide by the Finance Management Instructions in the management of any external contracts.

It is expected that Board Members and Officers will adhere to EBAMP's Code of Conduct. They are expected to indicate their commitment to the Code by signing a statement (Form EB001) and returning it to the Secretary-General.

### **3.3.3.3. Guidance on Register of Interests**

- a) Members of the EBAMP Board and Officers are expected to act impartially and objectively, and to take steps to avoid any conflict of interest arising as a result of their membership of, or association with, other organisations or individuals. In order that this should be clearly apparent, the EBAMP Board has established a Register of Interests (Form EB001). Declaration of interests in the Register is compulsory.
- b) It is impossible to draw up an exhaustive list of organisations, still less of individuals, association with which might, under certain circumstances, be considered to bring about a possible conflict of interest. In general, the EBAMP Board believes that Members of the Board and Officers should declare membership of, association with, or financial interest in any organisation if, in the view of the Board Member, a conflict of interest or the appearance of such a conflict could arise.
- c) It is proposed that the following interests need NOT be declared:
  - i. Posts held in the ordinary course of employment or practice
  - ii. Ordinary membership of professional bodies
  - iii. Fellowship of professional bodies or specialist scientific bodies
  - iv. Membership of local community organisations
- d) It is proposed that the following interests SHOULD be declared:
  - i. Any Office held in a professional or scientific body, specialist society, or any body in the public, private or voluntary sector
  - ii. Consultancies, directorships or advisory positions if they relate to a medical, healthcare, pharmaceutical or scientific company or organisation, public body or political party, or any company that seeks work in the healthcare sector
  - iii. Financial interests in, or other potential sources of income from, medical,

healthcare, pharmaceutical or scientific companies or organisations, although investments in funds or other investment vehicles managed by an independent third party (e.g. unit trusts, investment trusts, pension funds, ISA's etc.) need not be declared.

- iv. Business interests where relevant to the activities of EBAMP
- v. Any other public appointments which are not held in the ordinary course of employment or practice
- e) In case of doubt, members of the Board may seek the advice of the Secretary-General regarding what memberships, associations or interests they should declare.
- f) The Secretary-General will be responsible for keeping the Register of Interests. Members of the Board should amend their entries in the register as soon as possible following any change in their circumstances, and will, in any event, be invited to update their entries each year.
- g) The Register will be reviewed by the Secretary-General, the President of the Board, and the EBAMP auditors annually and they will take appropriate action.

#### **3.3.3.4. Connected Persons**

Board Members and Officers are expected to register the relevant business interests and offices of connected persons in addition to their own. Connected persons are defined by as:

- members of the same family or household who may be able to influence, or be influenced by, the Board Member or Officer
- any business partner of a Board Member or Officer
- trustees of non-charitable trusts, the beneficiaries of which are Board Members or Officers or persons connected with Board Member or Officer.

#### **3.3.4. Election of Board members**

##### **3.3.4.1. Notification**

Five months prior to the end of a Board member's term of office the Secretary-General will inform the liaison persons of the necessity to hold elections and request nominations for the posts that will become vacant.

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

- a formal letter of nomination including the name and affiliation of the nominee, and supported and seconded by the liaison person making the nomination and the President of the EFOMP NMO to which the liaison person is a member.
- a letter from the candidate accepting his/her nomination
- a statement (up to 500 words) by the candidate in relation to the post for which he/she is nominated demonstrating a 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 as specified in section 3.3.2.

### **3.3.4.2. Scrutiny of the submitted nominations**

The 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.

### **3.3.4.3. Appointment of Tellers**

The Board will appoint two tellers to receive and count the votes.

### **3.3.4.4. Issue and Return of Voting Papers**

The Secretary-General will issue a ballot paper to each liaison person at least two months prior to the completion of the Board member's term of office, together with information about each candidate. The voting paper will list all the candidates standing for each post.

Voting papers will normally be issued and returned to the tellers by email. Voting papers must be returned to the two tellers no later than by a date specified by the Secretary-General which must be at least 14 days after issue of the voting papers.

### **3.3.4.5. Recording and Counting Votes**

Voters should record on the voting paper their order of preference (or ranking 1, 2, 3 etc.) for each candidate for a particular post. A majority of votes (more than 50% of valid votes) is required to be cast for a particular candidate for that candidate to be declared the winner. Voters are only required to declare their first preference for their vote to be valid - declaration of second and subsequent preferences is optional.

1. First Round. The first preference votes are counted and if one candidate receives a majority of first preference votes then he or she is declared the winner.
2. Second Round. If no candidate is identified as the winner in the first round then the candidate with the least number of first preference votes is eliminated and the second preference votes of that candidate are distributed between the remaining candidates adding to their first preference votes. If one candidate now receives a majority of votes cast (first and second preferences) then he or she is declared the winner.
3. Third and Subsequent Rounds. If no candidate in the second round obtains a majority of the votes cast then the above procedure is repeated, with the candidate with least number of total (first and second preference) votes cast eliminated and their next preference votes distributed amongst the remaining candidates, and this procedure is repeated till one candidate receives an outright majority.

## **3.4 Operating Procedures**

### **3.4.1 Event Accreditation Procedure**

1. The Board will accept applications from the organisers of educational events, excluding degree courses at present, to assess and provide accreditation (if appropriate) for CPD for Medical Physicists.

The type of events that EBAMP can accredit are (but not exclusively):

- Courses
- Seminars
- Workshops
- Conferences

The accreditation of degree and other similar courses is not considered in this manual but will form part of the future work of EBAMP.

2. Applicants will submit to the Board the completed Application Form via EBAMP website together with documentation as specified on the application form. All information required and application form must be in English. Applications must normally be received at least three months prior to the activity.
3. Within 2 weeks of receiving the application form and payment of fees for accreditation, the Secretary-General of the Board will review the documentation received to ensure that it meets the requirements. Additional or corrected material may be requested by the Secretary-General who, in cases where there is doubt, may confer with the president.
4. The Secretary-General will appoint 3 Board members as assessors one of whom will be the lead assessor.
5. The assessors will evaluate the application according to 3.4.2.
6. Each Assessor will compare the information in the application against the general requirements and return their assessment to the Lead Assessor.
7. The Lead Assessor will maintain a record of all communications.
8. The Lead Assessor will send the assessment reports and the record of communications to the Secretary-General advising of the accreditation not later than 3 weeks after receipt.
9. The Board shall determine the accreditation status of the event and inform the applicant of the determination normally within 6 weeks of the complete documentation having been received.
10. Should the applicant wish to contest the outcome then they may appeal using the process described in section 3.4.3
11. All accreditation activities will be kept confidential until the successful completion of the process.

#### **3.4.2 Event Evaluation Procedure**

1. The Assessors will use the evidence supplied to assess whether the event meets the criteria for a medical physics educational programme. In the case of courses this will be the EQF level of the course itself as specified in the application. For other training events it will be whether it is suitable for participants whose education in medical physics has reached the EQF level as specified in the application. They will also assess the number of CPD points to be awarded as specified in Annex 1.
2. In reaching this view the assessors will make the following judgements:
  - Are the learning outcomes clearly stated? Do they reflect the teaching that the student will receive?
  - Is the supporting material sufficient to support the learning outcomes?
  - Is the programme aimed at the EQF level as specified in the application form?
  - Where the event is in the area of ionising radiation, do the learning outcomes reflect the relevant KSC's as set out in RP174 Annex 1 [1]?
  - Are the speakers at the event suitably qualified to deliver the programme?
  - Is the teaching methodology suitable?
  - Is the method for recording attendance robust?

- Where an end-of-course assessment is planned; is it appropriate and at the correct level?
3. The Assessors can request further information from the applicant. Such a request must be made through the Lead Assessor.
  4. The assessment will be sent to the Lead assessor using Assessment Form.
  5. The Lead Assessor will collate the assessments made by the three assessors and prepare a report for the Board giving the reasons recommending or refusing accreditation and the number of CPD points awarded. This should be countersigned by the other two assessors before being sent to the Secretary-General.
  6. Assessors should attempt to reach unanimous agreement as a failure to do so means rejection of the application.
  7. The Lead Assessor will maintain a record of all communications, interviews, etc.
  8. The Lead Assessor will send the collated report with recommendations, the individual assessment reports and the record of communications to the Secretary-General.

### **3.4.3 Complaint Handling Procedure**

An applicant has the right to appeal to the Board if their application has been refused and they have concerns about the manner in which the assessment has been made. Such appeals must be made to the Secretary-General in writing and within one month of receiving the Board's decision. Appeals shall be accompanied by a statement from the appellant setting out the grounds for the appeal. All appeals will be treated as matters of urgency. In the event of an appeal the Board will, after consultation with the Secretary-General, appoint an Appeals Panel consisting of an independent chairman and two board members not previously associated with the application. The Panel will:

- a) Consider the statement from the appellant setting out the grounds for the appeal
- b) Consider all available information from the original assessment
- c) Call for such additional information as it might consider necessary
- d) Produce a report with recommendations for the Board.

The Board, excluding those involved in the assessment and the appeal, will decide the outcome of the appeal and inform the appellant. The Board's decision is final.

The Secretary-General will inform the appellant of the outcome of the appeal giving such reasons for the decision as the Board judge to be appropriate.

### **3.4.4 Document and Record Handling Procedure**

1. The Board will maintain a database of all applications to include the following information:
  - a) Title of the event
  - b) Name and address telephone, FAX and E-mail address of the applicant
  - c) Number of CPD points awarded to the event
2. The following records will be retained for ten years:
  - a) Application forms
  - b) Supporting documents referred to in the application form
  - c) Assessors reports, including the records of communications, etc.
  - d) Report of any Appeal Panel

- e) Minutes of Board meetings.

### **3.4.5 Document Review**

#### **3.4.5.1. Control of documents**

A procedure must be in place that defines the controls needed to:

- approve documents for adequacy prior to issue,
- review and update as necessary and re-approve documents,
- ensure that changes and the current revision status of documents are identified,
- ensure that relevant versions of applicable documents are available at points of use,
- ensure that documents remain legible and readily identifiable,
- ensure that documents of external origin are identified and their distribution controlled, and
- prevent the unintended use of obsolete documents, and to apply suitable identification to them if they are retained for any purpose.

#### **3.4.5.1. Control of records**

A procedure must be in place that determines how records are established and maintained to provide evidence of conformity to requirements and of the effective operation of the quality management system. Records must remain legible, readily identifiable and retrievable. This procedure must describe the controls needed for the:

- Identification,
- Storage,
- Protection,
- Retrieval,
- Retention time and disposition of records.

### **3.4.6 Management Review**

#### **3.4.6.1. General**

Management Review meetings for all the EBAMP functions must be held periodically to assess the effectiveness and continuing stability of the Quality Policy and Objectives. A procedure with detailed rules for scheduling, conducting and the recording of management reviews must be put in place.

Minutes of the Management Review meetings must be recorded and include a plan for implementing actions defined during the review. These minutes will be sent to the liaison persons.

#### **3.4.6.2. Review input**

The input to the management review procedure includes information on the:

- Results of audits,
- Education and training providers' feedback,
- Process performance and accreditation conformity
- Status of preventive and corrective actions,

- Follow-up actions from previous management reviews,
- Changes that could affect the quality management system, and
- Recommendations for improvement.

#### **3.4.6.3. Review output**

The output from the management review includes any decisions and actions related to the:

- Improvement of the effectiveness of the quality management system and its processes,
- Improvement of accreditation related to education and training provider's requirements, and
- Resource needs.

#### **3.4.7 Internal Audit**

Periodic audits of the EBAMP operational procedures will be performed. All the EBAMP procedures will be covered by audits performed within a period of two years.

If audit findings cast doubt on the effectiveness of the EBAMP operations then the EBAMP Board must take timely corrective action.

The findings of the internal audit and the actions taken, if any, must be documented in a report that it is submitted for consideration at the next management review meeting.

#### **3.4.8 External Audit**

At least every five years an external audit by a third party, accredited for external audits, should be performed on the EBAMP procedures and activities.

If the external audit findings cast doubt on the effectiveness of the EBAMP operations and activities then the EBAMP Board must consider the recommendations of the external third party audit and take timely corrective action.

The corrective actions taken, if any, must be documented in a report that it is submitted for consideration at the next management review meeting and communicated to the external third party auditors for their comments.

#### **3.4.9 Non-Conformity Handling**

In the event that a non-conformity is identified with regard to any EBAMP activity, the non-conformity must be recorded and corrective action initiated. If the non-conformity involves accreditation of an event that was already issued, the recommended corrective action must be notified to the involved organisation.

The whole investigation must be documented in a report that it is submitted for consideration at the next management review meeting.

### **3.5 Finance**

Once operational EBAMP will be independent of outside bodies. It may charge such fees for accreditation as it requires to support its activities. The level of fees charged will be determined by the Board and should be reviewed annually. Currently fees for accreditation in Annex 2

## References

- [1] European Commission Radiation Protection Report No. 174, "European Guidelines on Medical Physics Expert", Directorate-General for Energy, Directorate D — Nuclear Safety & Fuel Cycle, Unit D.3 — Radiation Protection, 2014, [http://ec.europa.eu/energy/sites/ener/files/documents/rp174\\_annex1.pdf](http://ec.europa.eu/energy/sites/ener/files/documents/rp174_annex1.pdf) (last accessed on 20th of February 2015)
- [2] Council Directive 2013/59/EURATOM of 5 December 2013 laying down basic safety standards for protection against the dangers arising from exposure to ionising radiation, and repealing Directives 89/618/Euratom, 90/641/Euratom, 6/29/Euratom, 97/43/Euratom and 2003/122/Euratom, OJ L13, 17/01/2014, PP 1-73, , <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013L0059&from=EN> (last accessed on 20th of November 2014)
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## Appendix A: Additional Definitions

The usual terms used in quality management systems are defined below:

<b>Audit:</b>	systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which audit criteria are fulfilled.
<b>Auditor:</b>	person with the competence to conduct an audit.
<b>Conformity:</b>	fulfilment of a requirement.
<b>Continual improvement:</b>	recurring activity to increase the ability to fulfil requirements.
<b>Correction:</b>	action to eliminate a detected nonconformity.
<b>Corrective action:</b>	action to eliminate the cause of a detected nonconformity or other undesirable situation.
<b>Customer:</b>	organization or person that receives a product. Customer can be internal or external to the organization.
<b>Customer satisfaction:</b>	customer's perception of the degree to which the customer's requirements have been fulfilled.
<b>Defect:</b>	non-fulfilment of a requirement related to an intended or specified use.
<b>Document:</b>	information and its supporting medium.
<b>Effectiveness:</b>	extent to which planned activities are realised and planned results achieved.
<b>Efficiency:</b>	relationship between the result achieved and the resources used.
<b>Infrastructure:</b>	organisation system of facilities, equipment and services needed for the operation of an organisation.
<b>Inspection:</b>	conformity evaluation by observation and judgement accompanied as appropriate by measurement, testing or gauging.
<b>Management:</b>	coordinated activities to direct and control an organisation.
<b>Management system:</b>	system to establish policy and objectives and to achieve those objectives.
<b>Nonconformity:</b>	non-fulfilment of a requirement.
<b>Objective evidence:</b>	data supporting the existence or verity of something.
<b>Organisation:</b>	group of people and facilities with an arrangement of responsibilities, authorities and relationships.
<b>Organisational structure:</b>	arrangement of responsibilities, authorities and relationships between people.
<b>Process:</b>	set of interrelated or interacting activities, which transforms inputs into outputs. Inputs to a process are generally outputs of other processes.
<b>Procedure:</b>	specified way to carry out an activity or a process.
<b>Product:</b>	result of a process.
<b>Preventive action:</b>	action to eliminate the cause of a potential nonconformity or other undesirable potential situation.
<b>Quality:</b>	degree to which a set of inherent characteristics fulfils requirements. The term "quality" can be used with adjectives such as poor, good or excellent.
<b>Quality assurance:</b>	part of quality management focused on providing confidence that quality requirements will be fulfilled.

<b>Quality control:</b>	part of quality management focused on fulfilling quality requirements.
<b>Quality management:</b>	coordinated activities to direct and control an organisation with regard to quality.
<b>Quality management system:</b>	management system to direct and control an organisation with regard to quality.
<b>Quality manual:</b>	document specifying the quality management system of an organisation.
<b>Quality objective:</b>	something sought, or aimed for, related to quality.
<b>Quality planning:</b>	part of quality management focused on setting quality objectives and specifying necessary operational processes and related resources to fulfil the quality objectives.
<b>Quality plan:</b>	document specifying which procedures and associated resources shall be applied by whom and when to a specific project, product, process or contract.
<b>Quality policy:</b>	overall intentions and direction of an organisation related to quality as formally expressed by top management.
<b>Record:</b>	document stating results achieved or providing evidence of activities performed.
<b>Requirement:</b>	need or expectation that is stated, generally implied or obligatory.
<b>Review:</b>	activity undertaken to determine the suitability, adequacy and effectiveness of the subject matter to achieve established objectives.
<b>Specification:</b>	document stating requirements.
<b>Supplier:</b>	organisation or person that provides a product.
<b>System:</b>	set of interrelated or interacting elements.
<b>Technical expert:</b>	audit person who provides specific knowledge of or expertise on the subject to be audited.
<b>Test:</b>	determination of one or more characteristics according to a procedure.
<b>Validation:</b>	confirmation, through the provision of objective evidence, that the requirements for a specific intended use or application have been fulfilled.
<b>Traceability:</b>	ability to trace the history, application or location of that which is under consideration.
<b>Verification:</b>	confirmation, through the provision of objective evidence, that specified requirements have been fulfilled.
<b>Work environment:</b>	set of conditions under which work is performed (conditions include physical, social, psychological and environmental factors, such as temperature, recognition schemes, ergonomics and atmospheric composition).

## Annex 1: CPD points criteria

<b>Course Components (and workshops, congress, ...)</b>	<b>CPD credit points</b>
Online lectures, seminars, tutorials, fora	1 x hours
Online compulsory reading	1 x hours
Face-to-face lectures, seminars, tutorials, fora	1 x hours
Face-to-face technical demonstrations	1 x hours
CPD Subtotal(1) credit points	$\Sigma$
If Subtotal(1)>35, then points exceeding 35 will be weighted 0.8 to be added	
<b>CPD Subtotal credit points (Qt)</b>	<b>Qt</b>
Face-to-face laboratory/clinical exercises and results analyze <b>(Qc1)</b>	2 x hours
Assessment <b>(Qc2)*</b>	
Several assessment during the course and final examination	Qt x 1
Final examination solely	Qt x 0.5
Language (promotion) <b>(Qc3)</b>	
Local/Regional (local language)	2
National (local language)	4
International (English language)	8
<b>CPD Total credit points (Qt+Qc1+Qc2+Qc3)**</b>	

Note: Restriction for total training hours scheduled including assessment time: max 7h/day, max 35h/week.

\* If a course or event is scheduled with an optional examination, two different CPD credit points could be assigned (with or without assessment) and such CPD credit points shall be included in the EBAMP Certificate of Accreditation. The CPD credit points will have to be included in the Certificate of Attendance for participants.

For those participants who do not pass the examination, the CPD credit points without assessment will be assigned.

\*\* If CPD credit points are decimal figures, then, those values would be rounded to the closest whole number.

**Annex 2: Currently fees for accreditation**

<b>Accreditation Fees (for application)</b>	<b>€</b>
First Application of an event (first time to be accredited)	130
Second time and every subsequent time	50