The 97/43/EURATOM Directive of June 30\textsuperscript{th} 1997, on health protection of individuals against the dangers of ionising radiation in relation to medical exposure, defines the Medical Physics Expert as an expert in radiation physics or radiation technology applied to exposure, with responsibility for the radiation protection of patients.

Medical Physics is an internationally recognised applied science in healthcare. It is concerned with the application of the principles, concepts, methods and techniques of physics to medicine.

Medical Physicists have an important responsibility for the calibration, safety, quality assurance and quality control of equipment used on patients, especially equipment using ionising radiation. They also have the responsibility for the introduction, adaptation and optimisation of new equipment and the methods by which they are used in hospitals. Furthermore, Medical Physicists carry out the dosimetry and planning, which are essential for radiological treatments on cancer patients. At present, most large hospitals in Europe have Medical Physics Departments. Their services face ever increasing demands.

As well as being involved in clinical activity, Medical Physicists have a role in research and the development of new methodologies and instrumentation for clinical use. They also have the responsibility for running training courses in medical physics and allied sciences for physicists, engineers, technicians and medical doctors.

Medical Physicists require a special qualification to perform these activities. Generally speaking, there is a broad consensus in Europe as to these requirements: Medical Physicists should have a University degree or equivalent, principally in physics, together with several years of specialised education and training. Furthermore, some of those training years must be spent in a hospital.

Medical Physics should be considered a \textbf{REGULATED HEALTH CARE PROFESSION}. The IOMP has lobbied the International Labour Organisation (ILO) to include Medical Physics as a profession in the ILO classification of professions.

In most European countries medical physicists have set up National Societies of Medical Physics. These Societies have joined the European Federation for Organisations of Medical Physics (EFOMP). The main objective of EFOMP is to harmonise and promote the best practice of Medical Physics in Europe.

The importance of the activities carried out by the approximately 5000 medical physicists in Europe is, in itself, a sufficient reason for this profession to be recognised as a regulated profession by the EU.

\section*{2. European legislation for the recognition of professional qualifications. Application to Medical Physics as a regulated profession.}

The recognition of Medical Physics as a regulated profession should, in principle, be accepted by every regulatory body. Medical Physics meets the requirements of the Directive 2005/36/CE, published in the Official Journal of the European Union C58 E1 of 08 March 2005. This should be achieved in each country via the recognition of professional qualifications.

The recognition of professional qualifications by Member States is an appropriate way for overcoming the main obstacle to the free establishment of persons and to the freedom to provide services. The freedom of medical
physicists to establish themselves in any of the European countries is, in fact, one of the objectives of EFOMP. This goal is common for any profession considering Article 47 (ex-57) of the EC Treaty.

The free movement of workers in an enlarged European Union requires a simpler and clearer system for the recognition of professional qualifications than the different systems adopted over the last forty years. At present, there is a clear willingness to formulate a legislative solution for the rapid recognition of professional qualifications.

In the case of a gap in the national legislation for the recognition of professional qualifications, the Member States must observe both the basic substantive and procedural principles established under Article 43 of the EC Treaty: “someone who is qualified in one of the countries to do a certain job, should be entitled to do the same job in another EU country.”

The profession of Medical Physicist has a group of characteristics that entitle it to automatic recognition, established in the Directive 2005/36/CE, based on co-ordination of education and training. These are:

a) Medical Physics can and must achieve the recognition of “Level E” as its level of qualification.

b) Medical Physics is a profession that should be considered as a healthcare profession, for which there is an automatic recognition of professional qualifications.

c) Medical Physics in Europe is a profession which has an Organisation (EFOMP) that represents the majority of Medical Physicists in the EU. EFOMP can pursue the necessary harmonisation of the learning plans in the Member States.

The European Commission has stipulated 3 preconditions to allow automatic recognition of the Medical Physicists in Europe:

- the agreement of the profession.
- a broad consensus among the Member States.
- advantages compared with the General system established in the directive 2005/36/CE.

The National Member Organisations (NMOs) of EFOMP recognize that the profession of Medical Physics can meet all the conditions required by the EU legislation in order to be considered a regulated profession in the field of human health care.

3. Medical Physics in Radiation Protection in the Medical Area.

EFOMP adopted in 2005 the following position regarding the responsibility of Medical Physicists in the field of Radiation Protection in Hospitals:

“The Medical Physics Expert as defined in the directive 43/97 must be the professional to supervise and assume the responsibilities of the Radiation Protection activities in Hospitals, including patients, working staff, members of the public and visitors to the Hospitals”.

The following statements should be considered: 1) Medical Physicists have a formal education and training in Radiation Protection as applied to medical activities. 2) Medical Physicists have the necessary skills to manage the equipment used in hospital to produce and detect radiation. 3) Medical Physicists have a relatively long practical training in Hospitals. 4) Clinical professionals regard medical physicists as invaluable specialists who facilitate the safe use of radiation in hospitals. 5) The Radiation Protection of patients, staff and hospital visitors is interconnected. For that reason, in many European Hospitals, the responsibility for the Radiation Protection of patients, staff and visitors is a medical physicist’s responsibility. 6) Quality Assurance and Quality Control in Radiotherapy, Nuclear Medicine and X-Ray diagnosis is, carried out or under the supervision of medical physicists. The results of these activities have clear implications in Radiation Protection.

Council of NMO’s Delegates, EFOMP meeting, Malaga (Spain), October 2006.