EURAMED's Vision on Medical Radiation Protection (Research)

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Abstract—While many other areas in radiation protection formed so called platforms in Europe, which provide strategic research agendas for their areas of interest, this did not happen for a long while in the area of application of ionising radiation which causes the largest man-made exposure at least in countries of the first world, i.e. medical exposure. Finally, in 2015 a European medical radiation protection strategic research agenda could be set-up and in 2016 a corresponding platform could be launched: EURAMED, the European Alliance for Medical Radiation Protection Research. In its SRA EURAMED defined its vision for medical radiation protection and the corresponding research needed. Five major topics were identified ranging from measurements of medical application related parameters like exposures and image quality to radiation biology aspects relevant for medical applications to individual optimisation strategies, to optimal use of techniques and harmonisation of practises finally to justification of the use of ionising radiation in medicine, all based on sufficient infrastructures for quality assurance. The ultimate goal is to individually lower radiation exposure and risk for patients and staff by interdisciplinary research between clinicians, physicists and engineers. Therefore it is essential that the results are translated into clinical practice.