



The Radiation Therapist profession: a challenge and an opportunity to improve safety and patient care in radiation oncology.

**Paris, 4 december 2009
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EFRS:

Founded in 2007

30 European radiographer societies

28 in European Countries

≈ 100.000 (Radiographers, Technologist, RTTs....)

EFRS ROLE:

Represent

Promote

Develop

The radiographer profession in Europe

**(medical imaging, nuclear medicine,
radiation oncology)**

EFRS AIMS:

Promoting patient safety and radiation protection

Promoting the use of the EFRS reference code of ethics

Developing European standards of professional practice

Promoting evidence based practice

Promoting harmonisation of initial and post-graduate education

Radiation Oncology scenario:

Complex therapeutic agent (ionizing radiation)

Rapid technological evolution (changes and heterogeneity)

New R.O. departments (Eastern and Southern Europe)

Strong multiprofessional interaction

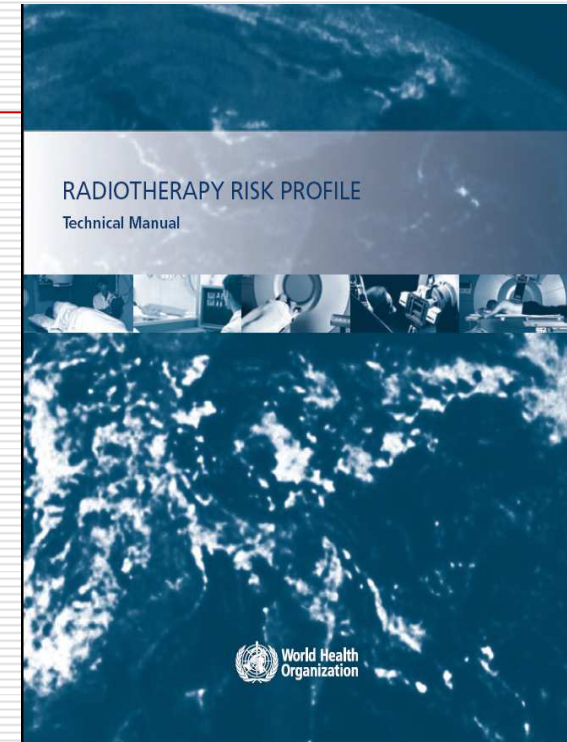
Multi Professional Team

Radiation Oncologist

Radiation Therapist

Medical Physicist

Radiation Oncologist	RO
Radiation Therapist (Radiation treatment technicians, therapeutic or therapy radiographer)	RT
Medical Physicists	MP



Radiation Therapist

Radiation Therapist (Radiation treatment technicians, therapeutic or therapy radiographer)	RT	Patient information and support Simulation Planning Producing and checking treatment plans Data transfer and monitor unit calculations Daily radiotherapy delivery Treatment verification Monitoring the patient on a daily basis
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Radiation Therapist



EUROPEAN COMMISSION
Directorate General Health and Consumer Protection - Europe Against Cancer Programme
Review of the European Core Curriculum for Radiotherapy Technologists
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ESTRO

Second review of the
European Core Curriculum
For RTs



INTERNATIONAL ATOMIC ENERGY AGENCY

**A Syllabus for the
Education and
Training of RTTs**
(radiation therapists/
therapy radiographers)

VIENNA, 2005

TRAINING COURSE SERIES

25

Radiation Therapist

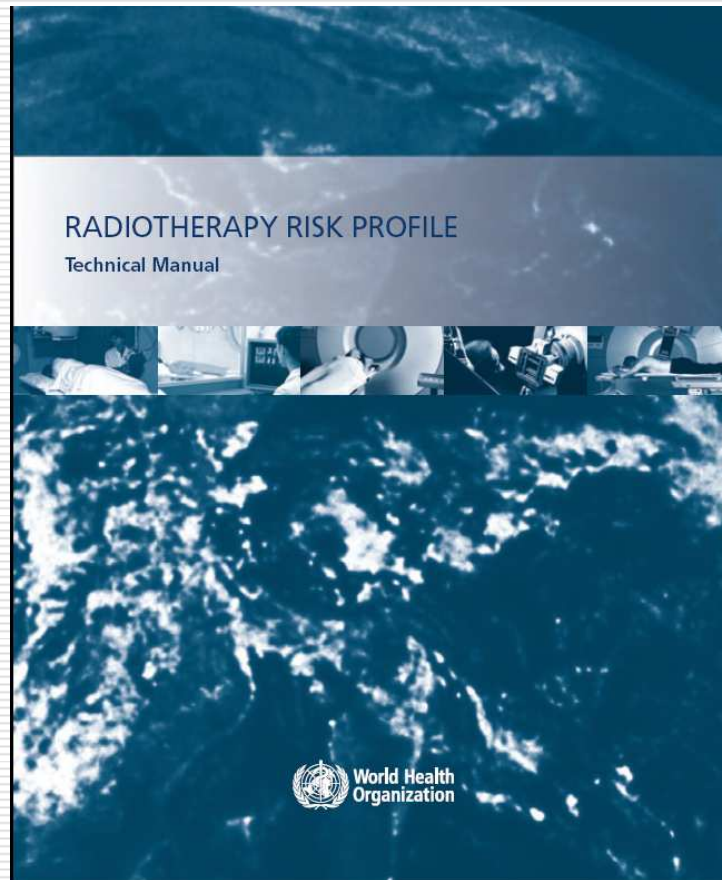


Table 5:
Treatment processes and identification of the professional groups responsible for each process.

Stage	Description	Responsibility		
		RO	RT	MP
1 Assessment of patient	History taking, physical examination, review of diagnostic material	•		
2 Decision to treat	Consideration of guidelines, patient wishes	•		
3 Prescribing treatment protocol	Determination of site, total dose, fractionation and additional measures such as dental review or concurrent chemotherapy	•		
4 Positioning and immobilization	Setting up the patient in a reproducible position for accurate daily treatment		•	
5 Simulation, imaging and volume determination	Determining region of the body to be treated using diagnostic plain X-ray unit with the same geometry as a treatment unit (simulator) or dedicated CT scanner	•	•	
6 Planning	Determining X-ray beam arrangement and shielding then calculating dose to achieve prescription		•	•
7 Treatment information transfer	Transfer beam arrangement and dose data from treatment plan to treatment machine		•	•
8 Patient setup	Placing patient in treatment position for each treatment		•	
9 Treatment delivery	Physical delivery of radiation dose		•	•
10 Treatment verification and monitoring	Confirmation of treatment delivery using port films and dosimeters Monitoring of the daily setup Monitoring of tolerance by regular patient review	•	•	•

Note: Professions responsible for process stages vary between countries

RTT titles

Different Titles used in the year 2008 in the European Union for our profession:

Austria	Radiologietechnologe / In
Belgium	Infirmier / Verpleegkundigen & Technologue en imagerie médicale / Technoloog medische beeldvorming
Bulgaria	Рентгенов лаборант
Cyprus	Aktinografos Diagnostikis / Diagnostic Radiographer & Aktinografos therapeias / Therapy Radiographer
Czech Rep.	Radiologický technik / Radiologický asistent
Denmark	Radiograf
Finland	Röntgenhoitaja / Röntgenskötare
France	Manipulateur d'électroradiologie médicale
Germany	Med.- tech. Radiologieassistent(in)
Greece	Technologos radiologias - Aktinologias (TEI)
Iceland	Geislafræðingur
Ireland	Radiographer / Radiographer
Italy	Tecnico sanitario di radiologia medica
Liechtenstein	Röntgenassistent
Luxembourg	Assitant technique medical de radiologie
Malta	Radiographer
Netherlands	Radiotherapeutisch laborant
Norway	Radiograf
Poland	Technik elektroradiolog / Technik elektroradiolog
Portugal	Técnico de radioterapia / Técnico de radiologia
Slovenia	Diplomirani radiološki inženir
Spain	Tecnico especialista de radioterapia / Tecnico
Sweden	Röntgensjuksköterska
Switzerland	Fachleute für medizinisch technische Radiologie / Techniciens en radiologie médicale / Tecnici di radiologia medica
UK	Radiographer

EUROPEAN FEDERATION OF
RADIOGRAPHER SOCIETIES

Radiation Therapist

Radiation Therapist

Great heterogeneity

Title (denomination)

Education (programme courses)

Scope of practice/level of responsibility

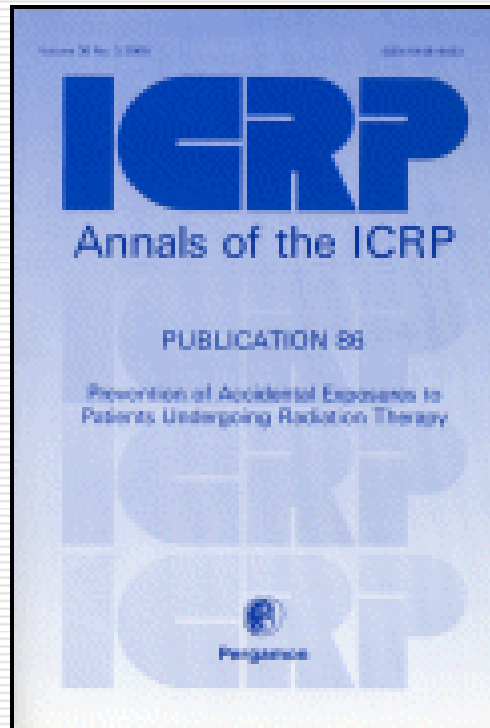
Radiation Therapist



Second review of the
European Core Curriculum
For RTs

3. THE PROFESSION OF RT

RTs are the group of professionals with direct responsibility for the administration of radiation therapy to cancer patients. This encompasses the technical delivery of the radiation dose, the clinical care and the psychosocial care of the patient on a daily basis throughout the treatment preparation, treatment and immediate post treatment phases. The RT is a member of the multidisciplinary team comprising essentially the clinician, physicist and RT. As the RT sees the patient on a daily basis he/she is also often a link person for the patient within the wider multidisciplinary team. They liaise with all the other associated professionals in ensuring the needs of the patient are met.



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Radiation Therapist

‘Radiation therapy

technologists have the responsibility for the set-up and delivery of the treatment, are involved in the simulation of the treatment, and have, therefore, an essential function in noticing any abnormal reaction of the patient or the machine and to report them. Thus radiation therapy technologists play an important role in preventing accidents .

Radiation Therapist



Category of staff Percent Count

	0%	4
Dosimetrist	5%	■ 43
Oncologist	8%	■ 70
Other	3%	■ 22
Physicist	11%	■ 92
Technical maintenance	0%	1
Therapist (sim/CT)	4%	■ 37
Therapist (trt unit)	69%	■ 591

Radiation Therapist

Education: (Council Directive 97/43/Euratom)

“Member States shall ensure that continuing education and training after qualification is provided and, in the special case of the clinical use of new techniques, the organization of training related to these techniques and the relevant radiation protection requirements.”

Radiation Therapist

High level of basic education

Continuous Professional Development

Specialisation and research

Acknowledgment of responsibilities and roles

Career perspectives

Radiation Oncology scenario:

Complex therapeutic agent (I.R)

Rapid technological evolution (changes and heterogeneity)

New R.O. departements (Eastern and Southern Europe)

Strong multiprofessional interaction

Radiation Oncology scenario:

Rapid technological evolution:

Obsolescence + creation of new roles and functions

Radiation Oncology:

Activity that needs:

**Involvement,
coordinate interaction and,
sharing of ethical and deontological responsibilities
of the multiprofessional team**

Radiation Oncology:

Needs a high level of cooperation within the Team

At international level:

**cooperation in order to define common guidelines and
roles of each profession in daily practice**

The EFRS undertakes action to describe European standards of competences and scope of practice in all fields of the profession and will start with Radiation Protection.

EFRS is searching for active cooperation with the RO team and with the RTT groups in European Societies

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Thank you for your attention

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