



One European Training Ecosystem: A Unified Framework for Excellence in Radiology Training

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Abstract

European radiology training should function as one integrated ecosystem, where standards guide training, training is validated through assessment, and quality is ensured through evaluation and accreditation. This article describes four complementary pillars of this framework, developed through over 30 years of strategic collaboration between the Union Européenne des Médecins Spécialistes (UEMS) and the European Society of Radiology (ESR): the European Diploma in Radiology (EDiR) for individual competence assessment; the European Training Assessment Programme (ETAP 2.0) for programme quality evaluation; the Accreditation Council in Imaging (ACI) for continuing medical education accreditation; and the EU-REST project, which has established EU-wide standards for radiology workforce, education and training. Together these initiatives provide a coherent and practical framework for achieving harmonised, high-quality radiology training across Europe.

Keywords: radiology training; UEMS; ESR; European Diploma in Radiology; EDiR; ETAP; accreditation; EU-REST; CME; postgraduate medical education.

Introduction

Based on our perspective on postgraduate medical training, European radiology training should function as one integrated ecosystem, where standards guide training, training is validated through assessment, and quality is ensured through evaluation and accreditation. This framework aligns fully



with the recommendations and guidelines which have emerged from the European Commission-sponsored European Union Radiation, Education, Staffing & Training (EU-REST) project.

A strategic collaboration between the European Union of Medical Specialists (UEMS) and European Society of Radiology (ESR and its predecessor European Association of Radiology (EAR)) has existed for over 30 years. Currently, UEMS defines professional standards and accreditation frameworks. ESR develops educational structures, curricula, and assessment tools.

In the following sections the four pillars of this ecosystem are described:

- Individual competence – European Diploma in Radiology (EDiR)
- Programme quality – European Training Assessment Programme (ETAP 2.0)
- Accreditation – Accreditation Council in Imaging (ACI)
- EU Standards – EU-REST project

Individual Competence – European Diploma in Radiology (EDiR)

In 1995, the Radiology Section of the Union Européenne des Médecins Spécialistes (UEMS) made a strategic decision not to establish its own independent educational board. Instead, the European Association of Radiology (EAR) and the UEMS Section of Radiology decided to work together on professional and educational activities across Europe through the EAR Professional Organisation Committee (POC) and Joint Commission Meetings between senior executive officers of the EAR and the UEMS. All EU educational and professional texts were approved by the UEMS and the EAR.

A major milestone occurred in 2005 with the creation of the European Society of Radiology (ESR) through the merger of EAR and the European Congress of Radiology (ECR). Notwithstanding the structural changes resulting from this and subsequent formal changes, including renaming the ESR POC to ESR Quality, Safety and Standards Committee (QSSC) in 2014, the fruitful collaboration with UEMS continued under the ESR and regular leadership meetings are still held.

Importantly, the UEMS Radiology Section chose not to develop its own European examination. Instead, it supported and collaborated with the European Board of Radiology (EBR), which ultimately led to the development of the European Diploma in Radiology (EDiR) as a unified standard of assessment. [1, 2]

Programme Quality – European Training Assessment Programme (ETAP 2.0)

The European Training Assessment Programme (ETAP) was established in 2001 as part of the broader effort to harmonise radiology training across Europe, under the joint leadership of the UEMS Radiology Section and the European Association of Radiology (EAR). The ETAP assessment required a physical training site inspection. The group recognised the need for modernization, to reduce costs and streamline the process to increase the number of training sites assessed every year and to promote wider adoption of ETAP. In March 2016, the ESR and the UEMS Radiology section agreed to modernize the project and established ETAP 2.0. The group moved the process to an online-only platform for submission of training site data, trainee surveys, responses to assessment questions, and videos detailing the training facilities. The online platform enables users – both representatives of applicant institutions and assessors – to see responses to assessment questions and manage documents and information at any time, thereby facilitating the submission scoring and the certification process.

EBR, UEMS and a junior assessor (who is a radiology trainee, either a European Junior Doctors (EJD) representative or an ESR Radiology Trainees Forum (RTF) Subcommittee representative) from countries across Europe collaborate on the assessor panel to review and score the online submission.



A series of online interviews lasting 1.5 hours in total with faculty and trainees in the centre is delivered using questions based on the centre's submissions and evaluates delivery of the UEMS ETR for radiology (European Training Curriculum for Radiology).

A final report and certification is then issued to the centre. This assessment provides training centres with an external evaluation of their training programme and a roadmap for self-improvement over the following 5 years.

The ETAP 2.0 recertification process commences 5 years after primary certification procedure. The recertification procedure is shorter than the primary assessment and focuses on changes to the training programme and responses to the primary assessment report. [3]

Accreditation – Accreditation Council in Imaging (ACI)

In January 2000, the European Accreditation Council for Continuing Medical Education (EACCME®) was established by the European Union of Medical Specialists (UEMS) with the aim of encouraging high standards in the development, delivery and harmonisation of Continuing Medical Education (CME) by establishing an independent peer-reviewed system for the accreditation of international CME events and international recognition of CME credit points, i.e. European CME credits (ECMEC®s) [4]. The ECMECs are recognised in the USA through the agreement of mutual recognition signed in 2002 between the UEMS-EACCME and the American Medical Association (AMA). Furthermore, in 2016 an agreement of mutual recognition of CME credits was signed between the UEMS-EACCME and the Royal College of Physicians and Surgeons of Canada.

The Accreditation Council in Imaging is the accreditation body of the European Board of Radiology (EBR) and provides a one-step service for CME accreditation, supporting the UEMS-EACCME in delivering and harmonising the highest level of CME in imaging. The EACCME ultimately determines the number of credits to be granted for each event or piece of e-learning material.

The ACI's purpose is to make managing CME quick and easy for all applicants and to be the beacon of European and global CME. Its main aims are:

- to ensure that CME meets the needs and expectations of medical professionals today;
- to ensure provision of high-quality CME/CPD activities to radiologists and modern, excellent accreditation services to education providers in the field of radiology;
- to be the unified voice of radiology professionals and education providers.

The ACI also investigates trends and developments in radiology education. Among the most impactful publications from this work are three surveys published in *Insights into Imaging* in 2023, 2024, and 2025, examining subspecialisation in European radiology, the evolution of CME delivery formats, and subspecialisation recognition across Europe [5, 6, 7, 8].

EU Standards – EU-REST Project

The EU-REST project was initiated in 2022 by the European Health and Digital Executive Agency (HaDEA), on behalf of the European Commission (EC), and fulfilled by a consortium led by the European Society of Radiology (ESR), and including representation from the European Society of Nuclear Medicine (EANM), the European Society for Radiotherapy and Oncology (ESTRO), the European Federation of Radiographer Societies (EFRS) and the European Federation of Organisations for Medical Physics (EFOMP). Its remit was to identify the current status of workforce availability, education and training within the 27 EU member states for those professions engaged in the medical



use of ionizing radiation, and to develop guidelines and recommendations for workforce numbers, education and training for these professional groups.

The project concluded in late 2024, with the acceptance and publication of its final report by HaDEA [9]. This report covers all involved professions; the radiologist-specific aspects of the project are detailed in a series of three papers, published in 2025 [10, 11, 12]. While much attention has understandably focused on the workforce recommendations for radiologists, the EU-REST report also contains a number of recommendations specific to education and training in radiology, which align with the structures and programmes detailed in other sections of this paper, as follows:

- Duration and content of radiology education and training should be harmonized across the 27 EU member states (and ideally, beyond):
 - Radiology training (excluding subspecialty training) should last 5 years
 - A standard and common curriculum should be followed (the ESR European Training Curricula {ETC} [13] offer an excellent example)
 - 1-year Fellowship subspecialty training programmes, to be undertaken after completion of 5 years' basic training, should be coordinated and standardized to conform to the Level 3 ETC and curricula developed by specific subspecialty societies
 - Minimum requirements should be set for the number of European Credit Transfer System (ECTS) credits to be achieved, case/procedure numbers to be undertaken in each subspecialty and the amount of practical training in radiation protection, safety and quality management to be provided during the basic 5 years of training
 - Certification of completion of training should be harmonized: a standardized examination (such as the EDiR) would be the ideal method; where existing national exams are used, their equivalence to the EDiR should be established
- ETAP certification should be a prerequisite for training centre accreditation
- EACCME should be established as the European currency for continuing medical education (CME) credits; EACCME credits should be accepted in all European countries as proof of CME
- A minimum number of CME credits should be established which need to be obtained in a defined period of time to prove CME; this number should be utilized in all European countries

The outcomes of the EU-REST project support the EC SAMIRA action plan to “...ensure that all categories of staff involved in radiology, radiotherapy and nuclear medicine receive adequate education, training and continuous professional development...”. Now that the EU-REST recommendations have been accepted and published by the European Commission [9], it is a matter for each member state to implement these newly-established EC standards.

The suite of initiatives and structures which have been developed in collaboration between the ESR and the UEMS, described in this paper and the session at the 1st UEMS Congress in May 2026, offer an excellent template to achieve these goals.

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