



HERCA as an Organisation

HERCA was founded in 2007 on the initiative of the French *Autorité de sûreté nucléaire* (ASN). It is a voluntary association in which the Heads of Radiation Protection Authorities work together in order to identify common interest in significant regulatory issues and propose practical solutions for these issues. HERCA is working on topics generally covered by provisions of the EURATOM Treaty.

The goal of HERCA is to contribute to a high level of radiological protection throughout Europe. In order to achieve this goal, the association will:

- build and maintain a European network of chief radiation protection regulatory authorities, with the definite wish to involve ALL such regulatory authorities, through-out Europe,
- promote the exchange of ideas and experiences, avoiding unnecessary duplication of work and learning from one another's best practices,
- develop a common approach to radiation protection and the way it is transposed into regulation,
- discuss and, where appropriate, express its consensus opinion on significant regulatory issues.

The uniqueness of HERCA, as compared to other existing networks in radiation protection, is that it is composed of the Heads of the Authorities, persons who either have decision capacity or can at least have a major influence on policy and decisions within their country.

HERCA Working Group on Medical Applications

The HERCA Working Group on Medical Applications (WG MA) covers all radiation protection issues concerning medical applications of ionizing radiation for diagnosis and therapy. The working group organizes its activities through Working Packages (WP):

WP "Justification"

The justification principle is one of the pillars on which radiation protection is based around the globe. The *International Commission on Radiological Protection* (ICRP publication 103 (2007)) distinguishes three levels in the justification of medical exposures:

- first level:** the use of ionizing radiation in medicine is "per se" justifiable,
- second level:** a defined radiological procedure must be "generically" justified in terms of its diagnostic or therapeutic objectives,
- third level:** individual justification of a defined radiological procedure.

Up to now, the WP "Justification" has focused its activities on the "third level" of justification, where the imaging request is tailored to the individual patient's needs.

Actions:

- A position paper with regard to justification was published on the HERCA website. The document is intended to provide the regulator's view on the roles and responsibilities in the justification process of medical exposures. The position paper considers the requirements of the new European Basic Safety Standards (BSS) Directive 2013/59/Euratom and discusses a number of emerging challenges associated with rapidly changing healthcare systems.

- Concerning the exposure of asymptomatic individuals in healthcare, a position paper on screening was published on the HERCA website. The position paper proposes a clear distinction between officially approved screening programmes and radiological procedures as part of an individual health assessment. The paper highlights specific requirements for the latter.

WP "Inspection Competence of Authorities"

The WG MA recognized that the regulatory bodies have an important role in ensuring that optimisation is a part of every medical exposure. In addition, there is a specific role with regard to the processes associated with justification and in particular the verification that justification has taken place and by whom. The WP "Inspection Competence of Authorities" considers both optimization and justification to be developed as part of an inspector competence workstream. To do so most effectively, regulatory bodies and their staff will need to be aware of developments in the fields they are regulating and inspectors will need an up to date working knowledge of current radiological practices.

Actions:

- The WG MA conducted a first inspection training course in UK in 2013, that was repeated in 2014.
- Building on the experience of established Nordic Inspection Workshops, a first pan-European Inspection Workshop focusing on justification and optimization in radiology is under preparation

WP "Stakeholder Involvement: CT Manufacturers"

In February 2010, the WG MA - through its WP "Stakeholder Involvement: CT Manufacturers" (WP CT) - started a dialogue with the four main CT manufacturers (GE, Philips, Siemens and Toshiba) and COCIR, which represents the radiological, electromedical and healthcare IT industry in Europe. As an important result of this process, COCIR and the CT manufacturers were willing to underline their responsibility on patient dose reduction and provided a voluntary self-commitment by May, 13th 2011. Hereby, they committed themselves to actions which offer the potential to achieve this goal.

Actions:

In a close collaboration with COCIR and the CT manufacturers, the WP CT

- closely assists and supports the implementation of the voluntary self-commitment of COCIR and the CT-manufacturers, and
- fosters a joint approach to inform both the public and relevant scientific bodies about the nature and scope of the voluntary self-commitment.

A further important result of this process was the insight that international cooperation is increasingly important for success, and that this cannot be limited to a European level. To address this issue,

- HERCA - through its WP CT has intensified its cooperation with other international regulatory and scientific bodies such as FDA and NCRP.

Others:

With respect to the recent publication of Council Directive 2013/59/Euratom, the WG MA is especially considering transposition and implementation of this new Basic Safety Standards Directive.