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# EuroSafe Imaging: be a star for your patients

## A holistic approach to quality and safety in radiology

Presentation of an initiative to aid imaging departments to approach quality and safety in radiology as a whole, to bring visibility to radiation protection and create positive impact on clinical practice.



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**T**he EuroSafe Imaging Stars (EIS) is an initiative designed to identify and recognise imaging facilities that embody best practice in radiation protection and that are committed to putting the principles advocated and concepts developed by the European Society of Radiology into practice.

The initiative was launched under the umbrella of EuroSafe Imaging in early 2016 to support the EuroSafe Imaging Call for Action. It provides imaging departments with an incentive to embrace a holistic approach to quality and safety in radiology, and thus, the Stars network makes efforts to give radiation protection greater visibility while simultaneously having a positive impact on clinical practice. To participate in the EuroSafe Imaging Stars initiative imaging departments have to perform an online self-assessment on their level of radiation protection.

The Euratom Basic Safety Standards Directive (Council directive 2013) lays down Basic Safety Standards (BSS) to guard against the dangers arising from exposure to ionising radiation. The requirements of the BSS Directive affect healthcare professionals in radiology in all aspects related to the safety and quality of procedures using ionising radiation. Thus, the BSS Directive provides the legal framework for most criteria of the EuroSafe Imaging Stars self-assessment. However, many of the criteria used in the self-assessment go beyond the BSS Directive's explicit requirements, which have to be observed by all imaging departments in the European Union since February 2018.

The EuroSafe Imaging Stars concept was revised in mid-2017 to enhance the self-assessment and to better reflect the legal requirements and the clinical

environment. The self-assessment now consists of 21 criteria, which are structured according to the following core topics: Optimisation, Justification, Quality and Safety, Education, Research, and Regulatory Compliance.

The criteria include, for example: the use of local diagnostic reference levels (DRLs) for CT; specific paediatric CT and fluoroscopy protocols; the availability of imaging referral guidelines; the use of operational clinical decision support (CDS) in clinical practice; regular equipment quality control; operational clinical audit; and radiation protection research activities. Seven criteria require the submission of additional evidence.

“ THE STAR RANKING IS  
A TOOL FOR CONTINUOUS  
SELF-EVALUATION AND  
IMPROVEMENT IN THE SAFETY  
AND QUALITY OF RADIOLOGICAL  
IMAGING ”

After a thorough evaluation of the self-assessment and supporting evidence, the participating imaging department is awarded a number of stars, from one to five, and listed on the “Wall of Stars” according to the level attained. The ‘Star’ ranking is a tool for continuous self-evaluation and improvement in the safety and quality of radiological imaging. This is why there is a need to repeat the self-evaluation every three years in order to track institutional performance and to determine areas for further improvement. The EIS network is involved in various activities undertaken by EuroSafe Imaging and the European Society of Radiology.

The ESR Audit and Standards Subcommittee developed a pilot project to test the ESR audit templates in collaboration with EuroSafe Imaging in mid-2017. Nineteen EuroSafe Imaging Stars facilities participated, testing five “essential” and 12 “optional” topics proposed for piloting. An online survey was carried out to collect their feedback on the templates. The results of the pilot project were very positive and promising, as the participating EuroSafe Imaging Star facilities considered the ESR audit templates easy to use and the topics relevant and important (Paulo 2018).

Twenty centres from the EuroSafe Imaging Stars network are currently also contributing to the

European Commission funded project EUCLID ([euro-safeimaging.org/euclid](http://euro-safeimaging.org/euclid)), which is dedicated to the establishment of clinical diagnostic reference levels for Europe. These EuroSafe Imaging Stars centres are providing data on ten selected CT and four interventional radiology clinical indications, for which clinical DRLs will be developed during the course of the project. The results of this will be available by mid-2020.

As of 31 July 2018, there are 90 EuroSafe Imaging Stars centres in 20 countries: 68 five-star institutions, 21 four-star centres, and one department with a three-star award. A further 15 centres are currently in the process of becoming EuroSafe Imaging Stars.

EuroSafe Imaging was particularly pleased to recently welcome its first EuroSafe Imaging Star centre from Latin America: the Radiology Department of the Hospital Italiano de Buenos Aires joined the network in June 2018, gaining a 5-Star rating.

EuroSafe Imaging looks forward to expanding the network of Stars across other continents as well. In particular, a collaboration with the AfroSafe campaign has been envisaged to help develop a similar concept in Africa. ■

## KEY POINTS

- ✓ The Eurosafe Imaging Stars (EIS) initiative provides imaging departments with an incentive to embrace a holistic approach to quality and safety in radiology
- ✓ To participate in the EIS initiative imaging departments have to perform a self-assessment on their level of radiation protection
- ✓ The EIS is involved in various activities undertaken by Eurosafe Imaging and the European Society of Radiology
- ✓ As of 31 July 2018, there are 90 EuroSafe Imaging Stars centres in 20 countries: 68 five-star institutions, 21 four-star centres, and one department with a three-star award



## REFERENCES

Council Directive (EC) 2013/59/EURATOM of 5 December 2013 laying down basic safety standards for protection against the dangers arising from exposure to ionising radiation, and repealing Directives 89/618/Euratom, 90/641/Euratom. [eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32013L0059](http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32013L0059)

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