Call for Expressions of Interest

The EuroSafe Imaging Campaign (ESI), in collaboration with the Clinical Imaging Physics Group at Duke University, USA, invites healthcare facilities across Europe to express interest in participating in an initiative to enhance CT performance monitoring using automated tools for image quality and dose assessment.

1. Project Overview

Achieving an optimal balance between diagnostic benefit and radiation risk requires combining traditional radiation exposure metrics with quantitative assessments of image quality. This initiative will implement advanced, automated, patient-based analytics to assess CT clinical image quality and radiation dose across clinical exams. By integrating these elements, the project will enable a comprehensive evaluation of CT performance that extends beyond dose alone.

2. Workflow

Healthcare facilities will:

1. Provide a server or a Linux-based virtual machine (Duke will provide specs and support) with secure network storage for the selected studies/clinical indications. Support from the hospital's IT department may be required to set up and maintain the server environment.
2. Install containers (Metis and MongoDB) on the server to the designated image directories.
3. Run the containers and set up the Linux system to restart or exit either container.
4. Monitor running and address issues.

Duke University will provide validated algorithms for CT image quality and dose assessment. Duke and ESI will support participating sites and analyze anonymized aggregate results. All data will remain on local hospital systems. Only anonymized quantitative results will be extracted for aggregated analyses, compliant with the EU General Data Protection Regulation (GDPR).

3. Eligibility Criteria for Participating Facilities

Interested imaging departments should meet the following requirements:

1. Clinical CT Protocols

Availability of CT acquisition protocols tailored to specific clinical indications.

2. Medical Physics Support

Participation of a diagnostic radiology Medical Physics Expert (MPE)

3. Equipment Quality Control

Regular quality control (QC) of CT equipment following regulatory guidance.

4. Diagnostic Reference Levels

Application of national or locally established Diagnostic Reference Levels.

5. Commitment to Radiation Protection Research

Demonstrated involvement in radiation protection optimization research, whether locally or through national/international programs.

4. Participation Benefits

- Access to advanced, validated algorithms for quantitative CT quality and dose analytics
- Participation in authorship of scientific publications, if data from the participating facility is included in the analysis
- Site-specific benchmarking reports and comparative analyses across peer facilities
- Enhanced visibility in radiation protection initiatives and research networks
- Contribution to European best practice development and guideline refinement

5. Expression of Interest Submission

Facilities interested in participating are invited to submit a brief letter of interest addressing each of the five eligibility criteria above, along with contact details of the departmental lead and supporting team members.

Deadline: December 23, 2025

Please direct expressions of interest or questions to: ESR EuroSafe Imaging Team info@eurosafeimaging.org