

Guide to the **Ionising Radiations Regulations: 1999** *X-ray Systems for Mail and Baggage Screening*

Ionising Radiations Regulations 1999 (IRR99)

The control of radiation exposure to individuals whilst at work, including persons exposed as a result of an employer's work activity, is covered by IRR99 in the UK. IRR99 broadly implements Council Directive 96/29/Euratom which outlines basic safety standards for the protection of the health of workers against the dangers arising from ionizing radiation.

IRR99 is enforced by the Health & Safety Executive (HSE) as part of the Health & Safety at Work Act 1974.



Does IRR99 apply to me?

IRR99 can apply to any employer who carries out work with ionising radiation. These employers are known as 'Radiation Employers'. For all practical purposes, employers of staff that use x-ray systems for mail and baggage screening are "Radiation Employers" in accordance with IRR99.

'Radiation Employers are required to consult a Radiation Protection Advisor ("RPA"). The HSE has issued a statement setting out the criteria of competence for RPAs - for further details refer to <http://www.hse.gov.uk/radiation/rpnews/statementrpa.htm>

What if I don't comply with IRR99?

The HSE employs inspectors to enforce health and safety law, including the enforcement of IRR99. Local Authority inspectors can also enforce the HSWA.

Non-compliance with IRR99 could lead to the following:

- Radiation exposure to employees and other persons
- Improvement notices
- Prohibition notices
- Prosecution (fines, adverse publicity, cessation of operations)

Note: This brochure provides overview information relating to some aspects of IRR99 that are relevant to the installation and use of X-ray systems typically used for mail and baggage screening. This brochure does not constitute advice related to IRR99.



Radiation Employer Duties

A Radiation Employers who work with X-ray inspection equipment have a legal duty to seek the advice of an RPA regarding compliance with IRR99. In practice, an RPA often facilitates the Radiation Employer's compliance with IRR99.

A Radiation Employer may seek advice from any suitable person relating to general radiation protection. Some of the issues to be considered are:

- Risk Assessment
- Restriction of exposure to ionising radiation
- Dose Limitation
- Suitable Radiation Safety Training (IRR99 Regulation 14)

A Radiation Employer must consult with an RPA on the following matters typically relevant to most mail and baggage screening X-ray systems (IRR99 Schedule 5):

- The implementation of requirements as to controlled and supervised areas (IRR99 Regulations 16 and 17)
- The prior examination of plans for installations and commissioning of X-ray systems in relation to any engineering controls and safety features provided to restrict exposure to ionising radiation.
- The periodic examination and testing of engineering controls, design features, safety features and warning devices and regular checking of systems of work provided to restrict exposure to ionising radiation.

A Radiation Employer must provide the appointed RPA with adequate information and facilities to perform their functions (IRR99 Regulation 13).

Radiation Protection Advisor (RPA) Roles and Duties

Radiation Employers must consult a qualified RPA regarding their compliance with IRR99.

The role of a Radiation Protection Adviser (RPA) is to advise a Radiation Employer on compliance with the IRR99 (IRR99 Regulation 13).

It is the responsibility of Radiation Employers to ensure their compliance with IRR99.

Radiation Protection Supervisor (RPS) Roles and Duties

Radiation Employers have a duty to draw up Local Rules for supervised areas.

The RPA will advise on whether the drafting of local rules and the appointment of an RPS is necessary.

An RPS has no duties under IRR99.



Quality Management Systems



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