The EU Directive on Artificial Optical Radiation 2006/25/EC

Cost - £1.1m per year (Open Europe report on EU Social Policy)

The EEF, the manufacturers' organisation, estimated impact costs at £50m, the HSE at £7.2m (Daily Telegraph)

Talking Points

The Directive has "no benefit in the UK"

So says the Health and Safety Executive, the body tasked with implementing the Directive. They maintain legislation already inexistence suitably protects from radiation from lasers and high powered lighting, meaning costs incurred by the Directive will be for nothing. (Daily Telegraph, 8 August 2009)

Added costs to Business

The EFF, the manufacturers' organisation, expressed concerns that the Directive would add costs to business as consultants would take advantage of the complex regulations to judge that working with artificial optical radiation is acceptable. (Source)

What is it?

A directive to limit the exposure workers have to artificial optical radiation to the skin and eyes.

The full directive sets down specific, scientific definitions and amounts of artificial optical radiation acceptable by EU standards.

The Health Protection Agency lists some of the main areas affected by the Directive:

- **Hot industries,** such as glass and metal working, where furnaces emit infra-red radiation.
- **Print industries,** where inks and paints are often cured by photochemical processes.
- **Art and entertainment,** where performers, models and other workers may be directly illuminated by spotlights, effect lighting, modelling lights and flashlamps.
- **Non-destructive testing,** which may involve the use of ultraviolet radiation to reveal fluorescent dyes.
- **Medical treatment,** where practitioners and support staff may be exposed to operating theatre spot lighting and the therapeutic use of optical radiation.
- **Cosmetic treatment,** making use of lasers and intense lights, as well as ultraviolet and infra-red sources.
- **Shop-floor and warehousing activities,** where large open buildings are illuminated by powerful area lights.
- **Pharmaceuticals and research,** where ultraviolet sterilisation and induced fluorescence may be in use.
- **Water treatment,** where ultraviolet sterilisation may be in use.
- **Research and education,** where lasers and LEDs may be useful tools.
- **Metal working,** involving welding or plasma cutting.
- **Plastics manufacturing,** involving laser bonding.

The HSE Guidelines on the directive list the following light sources as 'safe':

- All forms of ceiling-mounted lighting used in offices etc that have diffusers over bulbs or lamps.
- All forms of task lighting including desk lamps and tungsten-halogen lamps fitted with appropriate glass filters to remove unwanted ultraviolet light.
- Photocopiers.
- Computer or similar display equipment, including personal digital assistants (PDAs).
- Light emitting diode (LED) remote control devices.
- Photographic flashlamps – when used singly.
- Gas-fired overhead heaters.
- Vehicle indicator, brake, reversing and fog lamps.

OSHA set out the regulatory processes business need to comply with in order to abide by the directive.

Employers must:

1. Take into account the amount, frequency and wavelength range of any artificial optical radiation the workforce may come into contact with.

2. Take necessary precautions against the side effects of coming into contact with optical radiation and the chemical reactions caused by interaction.
3. Take into account the principles of the framework directive on occupation health and safety 89/391

The directive mandates that employers carry out and record a constant risk assessment on the threats from artificial optical radiation in the workplace.

Third Party Opinions

Steve Walter, health and safety advisor of the EEF, said "The HSE is taking a welcome, pragmatic approach to what is an impractical, unrealistic and unnecessary EU law that even [the HSE] admits will bring no additional health and safety benefits to the UK." (Safety and Health Practitioner)