



The Fibreoptic Industry Association

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## THE LATEST DIRECTIVE – FOR YOUR EYES ONLY

by

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Ones eyes are only too easily drawn away from any document from the “European Parliament and of the Council”: a title relating to “the minimum health and safety requirements regarding the exposure of workers to risks arising from physical agents” hardly makes it anymore attractive.

However, the three words “artificial optical radiation” makes anyone involved in the optical fibre industry pay attention. Directive 2006/25/EC, ratified on the 5<sup>th</sup> April 2006 has had no fanfare and further work is required before it becomes statute in each member state - nevertheless it may have significance for users of optical fibre transmission equipment.

This European Directive is the latest in a list of documents covering health and safety risks - but this one deals specifically with optical radiation, due to its effects on the health and safety of workers, in particular damage to the eyes and to the skin. The Directive covers the wavelength range 100 nm - 1 mm. Optical fibre communications fall nicely inside this range, operating in the IRA and IRB bands (780nm - 3000 nm).

The primary objective of the Directive is to establish limits and responsibilities for ensuring that they are not exceeded. Unsurprisingly, the responsibilities fall on employers - including both organisations that install and use optical fibre communications systems.

Before everyone starts panicking - it may be worthwhile reminding ourselves of the existing standards. There are two main standards: BS EN 60825-1 and BS EN 60825-2 and they have been around for years. The first defines the Class of optical devices – if you use optical fibre transmission or test equipment will be familiar with the little labels that confirm the Class of the device – normally Class 1 (essentially safe in all foreseeable circumstances). The second is more directly relevant to installers and users of communication systems. BS EN 60825-2 discusses the hazards generated by the connection of equipment of a given Class to optical fibre cabling - and the requirements necessary to control them.

Unfortunately, few professionals know about BS EN 60825-2. To address this shortfall, the FIA produced TSD-2000-5-1 (November 2001). Customers are required to define the hazard classification of their sites based on the equipment to be installed - which in turn defines how installers should label the ports, panels and cabinets. Without this action no professional audit of an installation can be “signed off” - since it is as bad to over-label as it to under-label the hazard. If customers wish to use more powerful equipment, they may have to re-classify the hazard in that area and re-label accordingly. This system requires the customer to have knowledge of, i.e. to record, the safety Class of all the optical equipment on their premises.

It is unlikely that the Directive will require more than this - at least for our sector of industry. Unfortunately most customers do not follow these simple rules. So if little else is achieved, maybe the Directive will act as a wake-up call to customers and their consultants.

FIA members have free access to all FIA Technical Support Documents. If any readers wish to obtain a copy of the TSD-2000-5-1, please contact the FIA Secretariat ([jane@fiasec.demon.co.uk](mailto:jane@fiasec.demon.co.uk)) or the author.