



National Operational Guidance



NFCC
National Fire
Chiefs Council

Developed and maintained by the NFCC



Contents

ATEX-approved radios 3

ATEX-approved radios

The Dangerous Substances and Explosive Atmospheres Regulations of 2002 (DSEAR) says that where a dangerous substance is, or is liable to be, present at the workplace, employers must make a suitable and sufficient assessment of the risks to their employees.

In the DSEAR, an explosive atmosphere is defined as a mixture of dangerous substances with air under atmospheric conditions in the form of gases, vapours, mist or dust which, after ignition has occurred, combustion spreads to the entire unburned mixture.

For UK fire and rescue services, the recommended standard for general applications where an explosive atmosphere is likely to occur in normal operation is Zone 1, or Zone 21 in the case of combustible dusts.

Equipment for use in places in which explosive atmospheres may occur must be selected based on the requirements set out in the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 1996 (EPS) unless the risk assessment finds otherwise.

It is recommended that radio equipment purchased for use with breathing apparatus (BA) meets the requirements for electrical equipment groups 1 or 2, subdivision IIC and have a minimum surface temperature classification rating of T4 (135° C). For further information on the specification of equipment for use in explosive atmospheres see British Standard BS EN 60079-0:2012+A11:2013 Explosive atmospheres. Equipment. General requirements.

Radio systems where two or more items of equipment are assembled together to form a product in its own right should meet the same standard.

For further information see: [HSE - The Dangerous Substances and Explosive Atmospheres Regulations 2002 \(DSEAR\)](#)