

ELECTRONIC MAGNETIC FIELDS RISKS AND EXPOSURES AND POTENTIAL INSURANCE COVERAGE



RISK AND EXPOSURE OVERVIEW

Electronic Magnetic Fields (EMF) continue to be carefully scrutinised by both insurers and insureds. EMF are those areas where electric and magnetic forces may occur, such as near electric currents, magnets and broadcasting antennas. Generally the EMF is regarded as a modification of space itself, enabling it to store and transmit energy.

Concerns have been expressed that electromagnetic signals emitted by mobile telephone handsets and base stations may pose health risks at exposure levels below existing guideline levels and may interfere with the operation of electronic equipment.

The National Institute for Occupational Safety and Health (NIOSH) has researched key areas where workers may be exposed to possible EMF health risks. These include:

- RF (radio frequencies) including broadcast antennas, induction heaters and cell telephones
- ELF (extremely low frequencies) including AC electricity and video display terminals (VDTs)
- Static Magnetic Fields including DC electricity.

In domestic homes EMF exposures may come from all types of electrical appliances:

- Home wiring: EMFs can vary from room to room
- Computers: EMFs radiate from all sides of a computer, not just the monitor
- Waterbeds and electric blankets can create electric fields that penetrate six to seven inches into the body.

What this means for mobile phones:

- The most common way to use a handset or cell phone is to hold it to the ear, placing the EMF next to the brain
- There is no consensus around what level of EMF is safe
- Numerous studies have provided conflicting results on whether or not there is a causal link between EMF and cancer
- In the 1990s reports appeared in the media from reputable sources such as Time, The Wall Street Journal, ABC and CBS, raising the public's level of concern around the health impact of EMFs.

The World Health Organization (WHO) and European Union studies do not currently see evidence that the EMF causes adverse health effects. Further long-term studies are probably required.

AVAILABILITY OF INSURANCE COVER

The two main exposures from an insurance perspective appear to be:

1. Bodily injury claims brought by third parties



 Property claims brought by third parties due to diminution of property value (EMFs in the neighbourhood may be seen by third parties as the reason for the depreciation in the value of their property).

In Marsh's experience the London markets are generally mixed in their approach to EMFs. Some will not provide any cover at all if a client has even a remote exposure but will remain silent i.e. providing insurance coverage by not excluding EMF risks from current insurance policies in all other instances. Others will only remain silent and never offer positive insurance cover or will provide positive cover ex US or remain silent across the board depending on the risk. This situation has not changed for several years. Although the insurance situation depends on the industry sector and details of the exposure, in general, cover is available in the London market on a claims-made, annual aggregate limit (with costs included in the limit) basis.

TYPE OF COVER AVAILABLE

Insurance is mainly offered on a claims-made basis. In Marsh's experience, If there is exposure in the USA, cover will be more restricted. Indeed, the US is often excluded entirely, especially for mobile operators.

Occasionally losses-occurring policies for insureds with minimal EMF exposures remain silent and therefore potentially provide coverage.

Following a positive risk assessment, a typical company should anticipate up to GBP200million to GBP250million for potential sums insured.

The insurance markets in Germany and Belgium usually offer no higher than EUR10million of insurance coverage for EMF risks as a sub-limit under the general liability and environmental liability insurance policies. Markets may be more open to offering higher limits following a thorough and positive risk assessment.

Reinstatement is possible but, again, this depends on the exposure and is unlikely to be available for a mobile operator or handset manufacturer.

Major exclusions include diminution of property value and contractual liability, particularly where the insured company assumes major liabilities that would not normally accrue (e.g. assuming product liability for handsets).

Deductibles are likely to be high (minimum USD100,000).

CONCLUSION

Insurance availability in Germany, the UK and Belgium greatly depends on the sector, with coverage for a mobile operator or mobile phone manufacturer usually not available. For telecom and antenna mast operators, insurers are only willing to offer insurance coverage for potential bodily injuries after a thorough risk assessment of the key risk data, including the neighbourhood, technical data of the asset (e.g. radiation data), and legal and contractual liabilities. Third party property damages due to diminution of asset values to a neighbouring property may be difficult to insure. Where available, most insurers in Germany and Belgium offer insurance limits up to EUR10m as sublimit under their respective general and product liability and environmental liability policies. Higher limits may be available on the London insurance market.

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GRAPHICS NO. 12-1028