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mobile
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responsible
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development

Mast and Site Sharing

What is it?

There are two main ways in which a mobile phone operator can share a site;



Mobile phones cannot work without a network of radio base stations in places where people want to use them.

Mast or site sharing is when two or more operators locate their antennas on the same ground-based mast or locate their individual masts within the same compound

Co-location is when two or more operators place their antennas on the same building or structure, which is not a ground-based mast.

At present around two thirds of mobile phone network radio base stations in the UK are located on shared masts or other existing buildings or structures.

Why do it?

Mast or site sharing and co-location can help reduce the impact on the environment and often provides the most cost effective solution for the operators.

Under all of the UK Governments' planning guidance operators are encouraged to explore the possibility of using an existing mast or structure before seeking to put up a new one, wherever it represents the best environmental option. They have all developed prescriptive planning policy in this area.



Not always possible

Site and mast sharing by operators will always remain a priority but it may not be possible or be the most appropriate environmental solution in every case.

Mast sharing means there is more than one set of antennas on a mast, often making the structure taller. In addition the mast structure needs to be more robust, as it needs to support greater weight, so it may become more visually intrusive. In some cases local planning authorities and communities prefer to see several smaller masts, rather than one large mast because smaller masts have less visual impact.



Slim line design street furniture and bespoke designs can blend well into the local environment reducing visual intrusion. However, these discrete designs, e.g. slim line lampposts and telegraph poles, very rarely lend themselves to be shared with other operators because they are smaller and can only support the equipment of one operator.

Site and mast sharing may also not be possible because the existing site is not in the best place for the oncoming sharer's network coverage needs. Landowners or local authorities may also have developed policies of refusing to allow multiple telecommunication developments on their land and buildings.

Industry Mast and Site Share Initiatives

Mast and site sharing is a key element in the network operators' **“Ten Commitments to best siting practice”** www.mobilemastinfo.com

All of the operators have dedicated mast and site share teams, whose function it is to deal solely with incoming and outgoing sharing applications. These teams liaise at a national and local level.

All of the operators have individually negotiated reciprocal mast share agreements for standard mast sharing, redevelopment of existing masts and joint development of new masts. Similar arrangements have been put in place with other mast providers such as National Grid Wireless and Arqiva.

More recently the operators have introduced a cross industry website operated database for mast and site sharing. Sharing applications are now handled online, and the progress of all applications can be monitored using the database.

The database is also used for providing mast share statistics on a quarterly basis to each of the four UK governments.

In the development of the third generation networks (3G), operators have upgraded existing sites wherever possible, rather than build new ones, in order to reduce the impact on the environment.

Sharing sites can also lead to significant savings in terms of development costs compared with new build sites. Sharing equipment cabins and power supplies are two of the more recent initiatives that have been introduced to further reduce the development costs, and increase mast and site sharing.

Health Based Guidelines

All radio base stations are designed and built to comply with the International Commission on Non-Ionizing Radiation Protection (ICNIRP) radio frequency (RF) public exposure guidelines.

It is the responsibility of the operator that owns an existing mast to ensure the RF fields from the entire site are designed to meet the ICNIRP guidelines. On a co-located site it is the responsibility of the operator that joins the site to ensure compliance with the guidelines for the whole site.

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In Summary

The Mobile Operators Association represents the interests of the UK's five mobile phone network operators – 3, O2, Orange, T-Mobile, Vodafone – on radiofrequency health and associated town planning issues.

Mast and site sharing is a key element in the mobile network operators' **"Ten Commitments to best siting practice"**. The commitments have helped to ensure transparency in building mobile phone networks, provide more information to the public and local planners and facilitate discussions to improve the community's role in the siting of radio base stations.

When submitting a planning application for a new radio base station, if operators cannot utilise an existing mast or structure they must demonstrate the reason why to the Local Planning Authority.

All the operators consider mast or site sharing as an important part of the planning process but operators also agree that sharing might not be the best environmental solution in every case.

It is important to treat each application for a new radio base station on its merits, and for early discussions to take place between the operators and planning officers to try wherever possible to find the best solution that balances the technical needs of the system with the environmental impact for the proposed new development.

More information about radio base station deployment and the planning process is available at www.mobilemastinfo.com



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