

Industries where Cel-Fi will improve mobile phone coverage



Inadequate indoor mobile phone coverage is still a major problem worldwide. This is mainly due to the way that operators design their networks. Other factors, including building design, heavy demand and radio interference also contribute to this poor coverage. It is difficult for mobile phone signals to penetrate buildings because of new regulations using RF reflecting or solar reflecting glass. As a result of this, many modern structures suffer from poor indoor 'phone coverage. This doesn't mean that older buildings are any better. Pre-Victorian designs with thick walls and small windows, also suffer from poor indoor cellular 'phone coverage.

Here, we explain how this poor mobile 'phone coverage affects so many industries and why the Cel-Fi range of signal boosters will provide excellent solutions by improving operational efficiency.

Health Care

In hospitals there is a huge requirement for mobile phone coverage. You may have a hospital built in the seventies - but that's not too bad for indoor coverage as building regulations were less strict back then. However, when you have a new wing that meets current building requirements the chance is on the ground floor or in the basement, there will be no cellular coverage because those new buildings will be so well insulated/isolated from the outside world. Dead zones are much more than just an inconvenience. When it comes to patient care, immediate communications are critical. Doctors, for example, do a lot of dictation and file transfers, as well as conferring with other practitioners on wireless devices. Those records can't get lost or dropped. And they certainly don't have time to walk around to find people or a desk phone.

The challenge to gain coverage is difficult because there are unusually high levels of interference caused by an over-abundance of signals from medical equipment, wireless handsets, public address systems and pagers. Repeaters could be expensive to install, not to mention the time and effort spent on approvals and resolving latency and interference issues.



Public Services

There will be greater emphasis on coverage when the Public Safety sector goes full cellular with the new ESN network. For example, you cannot have a Police Officer chasing a criminal into a building. As soon as he goes into the building, he loses all radio comms. There are thousands of buildings throughout the country with very poor or little cellular coverage, that will need to be covered from a public safety point of view. But that's not just for the Police, that's for every Blue Light service when they transfer.

Also, if a police officer is tasked with taking a prisoner to court and is unable to communicate directly with the officer in the holding cell. This could result in delays. Likewise, an administrator working in a basement cannot contact the officer conducting an interview in an interrogation room to provide, helpful case background. In this instance, a Cel-Fi system would be quick and easy to install, giving enhanced safety and efficiency to police operations.

Hotel/Several Storey Buildings

In bigger cities, the only way to expand is to build skywards. Concrete is used in walls, providing the support needed to create a safe structure. This often means a mobile phone signal is less than optimal in the best of cases, or altogether non-existent in a building basement or underground. You may even find that there is minimal coverage on the first and second floors due to mobile phone signals being blocked by neighbouring multi-storey buildings.

A full-blown distributed antenna system is an option, but it's costly and takes up a lot of space. That's where the Cel-Fi range comes into its own. Cel-Fi GO can penetrate the dense, well-insulated areas insulation. The Cel-Fi WAVE platform provides added benefit, enabling a team to quickly access real-time performance data and manage the systems deployed throughout the building, via their smartphones.

Retail

There are many retail outlets in shopping centres, needing good mobile phone coverage for several reasons. An essential requirement is to have a card reader connecting with a bank. If that cannot be achieved this common form of payment cannot occur. Other retail tools can also rely on mobile phone coverage, including inventory and measurement checks, customer surveys using iPADS. Staff do not need to be burdened with these technical issues, taking them away from their primary duties with customers who can become frustrated by delays, making the company appear unprofessional.

Rural Economy

The Cel-Fi product range is ideally suited to rural businesses. If you are outside in a city you will generally receive a good cellular signal everywhere because there are more mobile phone masts. So, if your mobile phone loses signal, it will search for another base-station, automatically changing frequency if necessary. However, in the countryside, there are far fewer base stations so you might be outside, on the fringe of receiving a very weak signal. So, you may get coverage outside, but as soon as you go inside your building, it won't work.

Warehousing/Manufacturing

Some warehouses/manufacturing plants are built in accordance with the latest environmental standards, so the materials used to achieve the desired sustainability targets for new buildings have a detrimental effect on signal strength, blocking the signal completely in some parts of the building.

Car Parks

Some underground car parks have little mobile phone coverage because of thick concrete walls causing safety concerns for customers or residents.

Venues

Most venues are built with concrete floors blocking mobile signals, which can lead to poor coverage, poor voice quality, dropped calls and dead zones providing not only problems for employees but visitors as well.

Historic Venues

Historical buildings generally have poor coverage because of the way that they were built. But this does not stop them needing mobile phone coverage to operate, e.g. an organisation like the National Trust would need mobile phone coverage for their tour guides, or their guests, or even for the payment machines that may require a mobile phone signal.

Ports

Typically, at ports you have modern aluminium buildings with no windows (very much a RF reflecting design). So, you have good coverage outside but as soon as you walk inside there is very little or no coverage at all.

Cash Machines

As with many banking organisations, a good number of branch operations are housed in buildings with thick concrete walls that interrupt mobile phone coverage coming into the locations. In many cases, the layout and building materials not only lead to dropped calls, data gateways are also unable to connect to modems.

These are just a few of the many scenarios where the Cel-Fi system could provide a vast improvement to your business mobile 'phone coverage.

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To find out more about the Cel-Fi product range visit our website at: <https://antennapro.co.uk>
or contact our team on 01227 743099 or email: sales@antennapro.co.uk