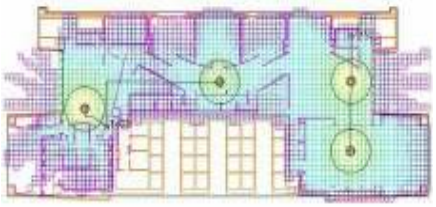
Enterprise - Full Premise Coverage

For wireless applications to function properly, they require the right in-building coverage, which involves more than just proper antenna placement and access point design. Today's work force is more mobile, and the desktop of choice is usually a laptop. As wireless becomes more ubiquitous, it enables an entire collection of new applications that can be used to communicate with employees when they are away from their offices, monitor sensors around a building and even transmit video streams. With the popularity of Apple's iPhone and similar devices, more IT workers want always-on Internet from their smartphones.

In the hospitality industry, many hotel owners recognize they have to attract premium guests and offer corresponding premium services. They are doing so with various wireless technologies that will open guest doors, track the items in the minibar and deliver Internet telephony to each room.



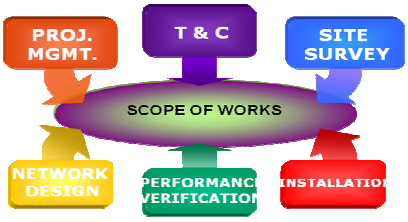
For these new applications to function properly, wireless has to be available everywhere. That requires designing the right in-building coverage, which involves more than proper antenna placement and access point design to avoid radio dead spots. There are many issues to resolve, particularly if the requirement is to support multiple wireless technologies, including WiFi and cellular voice connections. There are multiple standards to support and mixing wired and wireless infrastructure can be more of a black art than cut-and-dried engineering. Deploying centrally managed wireless solutions will take some careful planning and vendor evaluations.

Upgrading Existing 2G to 3G and beyond

Given GSM system is widely used and deployed, most commercial buildings and hotels will have an existing indoor GSM wireless system. However, such systems are incapable of supporting new technologies at the present system layout. Higher frequency and high data rate services required significant restructuring of wireless infrastructure. Data intensive services require more bandwidth per subscriber (and per cell site), in addition to stronger and more localised coverage and capacity to provide the expected quality of service. In short, 3G, WiFi and WiMax require a different type of radio network architecture, because there are additional challenges in delivering signals and the service usage model will be much different than it was for GSM and 2G systems.

As a result, an existing 2G system shall face challenges of insufficient coverage and capacity to serve 3G requirements. In some very old 2G systems, RF components that make up the Antenna Feeder System may not support higher frequency bands of 3G and beyond, thus making such systems totally unable to support data and broadband applications.

5 Bar Coverage is your most suitable choice for building and hotel owners to perform an end-to-end implementation of a multi band and multi system indoor wireless solution covering Tetra, GSM, CDMA, 3G, WiFi and WiMax technologies.



If you have a building with an existing 2G system that require an upgrade to 3G services, we will perform a complete analysis of the existing system and recommend the most optimum solution. Our methodology is based on a high re-use factor of the existing system, maintaining the location of all existing antennas, compensation of power and path loss of the new system and most importantly, we shall recommend an implementation that does not interrupt current services nor create a down time of the current services.