

Operators of wireless networks demand RF designs of the greatest precision and accuracy, leading to the utmost in network performance. They also expect base station deployments to be optimized to meet coverage and capacity objectives as set out in the design phase.

Dedicating an internal team to RF design and optimization is not only daunting for many wireless operators, it may also turn out to be an unwise business decision. Why?

- The RF design skill set is highly specialized and in relatively short supply.
- As a build oriented activity, RF design workloads tend to fluctuate, leading to a potentially large amount of idle time. During build-out lulls, this highly skilled resource pool may need to be redeployed into areas where their expertise isn't fully realized.
- Premium quality RF prediction tools are complex and very expensive. Engineers must be highly skilled and thoroughly trained to fully exploit the tool's potential. As with RF designers themselves, these costly tools are not adding value when they are idle during lulls in network build activity.

RF Design is often viewed as a peculiar combination of science and art. Professionals proficient in RF design are rare – particularly those with in-depth knowledge of emerging technologies such as WiMAX.

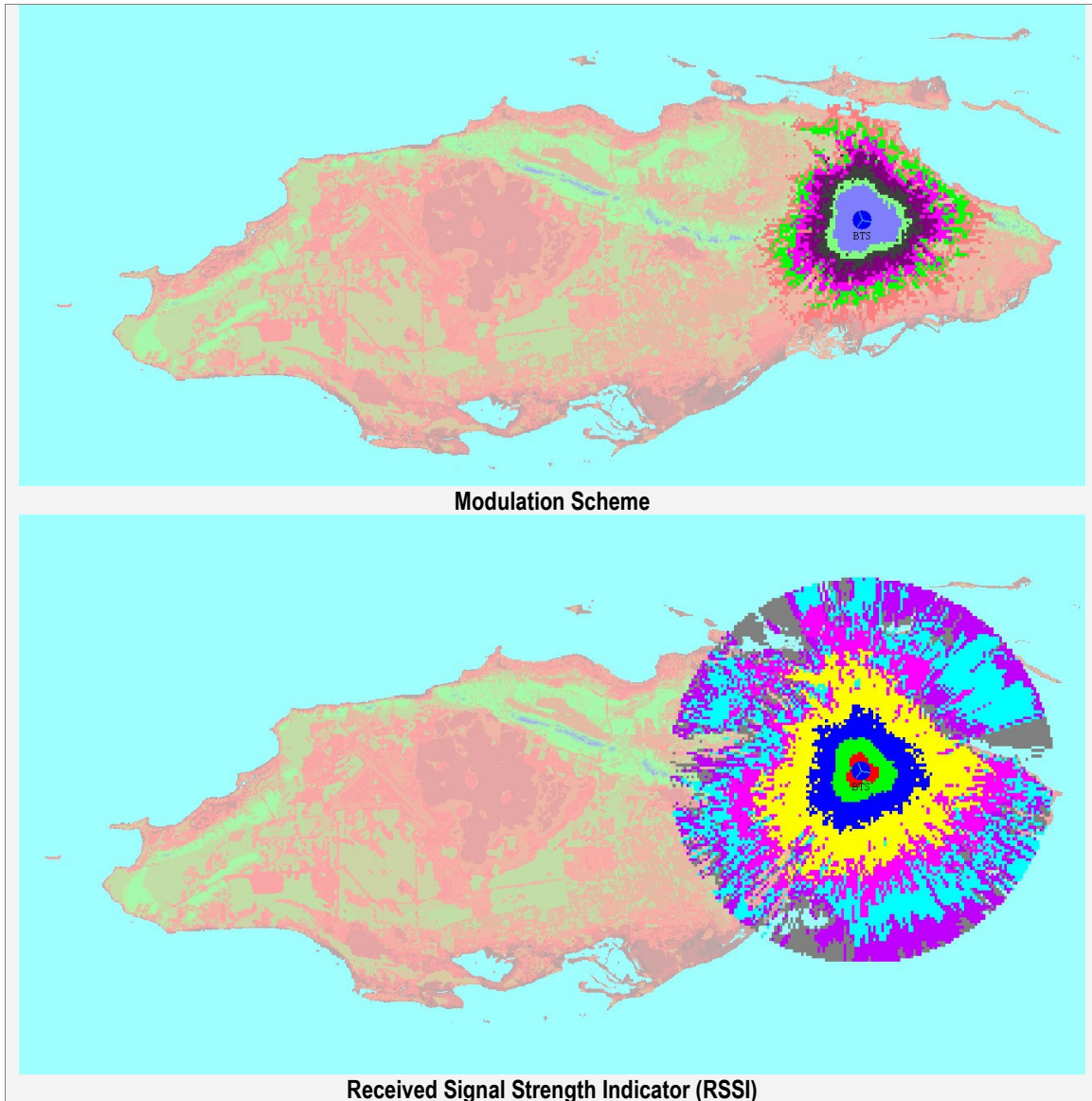
The **WireE RF Design and Network Optimization Centre** is rapidly evolving into a centre of excellence for Radio Frequency (RF) engineering and optimization. Our intellectual capital combined with the use of industry-leading RF planning and design tools assures every client will have a high performance network design targeted to address their fundamental business objectives.

WireE will work with your engineering and management teams to determine coverage objectives and capacity targets on a market-by-market basis. Using our engineering expertise in combination with sophisticated propagation prediction, frequency planning and capacity calculating tools, the WireE team will create a preliminary plot depicting coverage based on base station site assumptions.

From there a site search ring can be extrapolated where the strongest candidate sites for each base station location can be identified. WireE's expert Site Acquisition team can be made available to secure sites in the event your company doesn't have a pre-existing relationship with prospective landlords.

Upon securing all sites for the market, WireE will take the geographic coordinates of each site and run a precise propagation, frequency reuse and capacity prediction model. At this point, specifics such as sectorization and antenna pattern characteristics will be factored in.

While the output of these studies forms the basis for site construction, it also provides you, the operator, with service level expectations as depicted in the examples below.



Optimization: Ensuring Your Network Performs As Designed

As a final step in perfecting your wireless network deployment, WireE will collect performance data through coordinated drive testing. The collected data will then be contrasted with the predicted data. Antenna tilt, azimuth and other recommended adjustments will then be forwarded to the project management team for implementation.

Your Data is Valuable: WireE Will Protect It

Your prediction and capacity data is extremely valuable today, and it will be tomorrow as well. With this in mind, WireE will ensure all design data and documentation is managed securely by our team of engineering professionals.

Your Network is Dynamic: Let WireE Manage Your Capacity and Coverage Enhancements

With a growing customer base, it's inevitable that capacity thresholds on your network will be reached. Business drivers could also dictate expansion of your network's footprint. With WireE's intimate knowledge of your production network design, you can be assured that expansion costs will be optimized through your relationship with WireE. Naturally, WireE's best-in-class engineering practices will ensure your network expansion objectives are soundly met.

About WireE

As an international wireless professional services company, WireE specializes in the cradle-to-grave deployment of wireless networks including: Site Acquisition, RF Design, IP Core Network Design, Furnish and Installation of network infrastructure, along with Network Monitoring services and Billing solutions. These comprehensive services are supported by leasing options for the operator. In addition, WireE offers extensive consulting expertise in enterprise wireless solutions.



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