dL-RAS THEORY

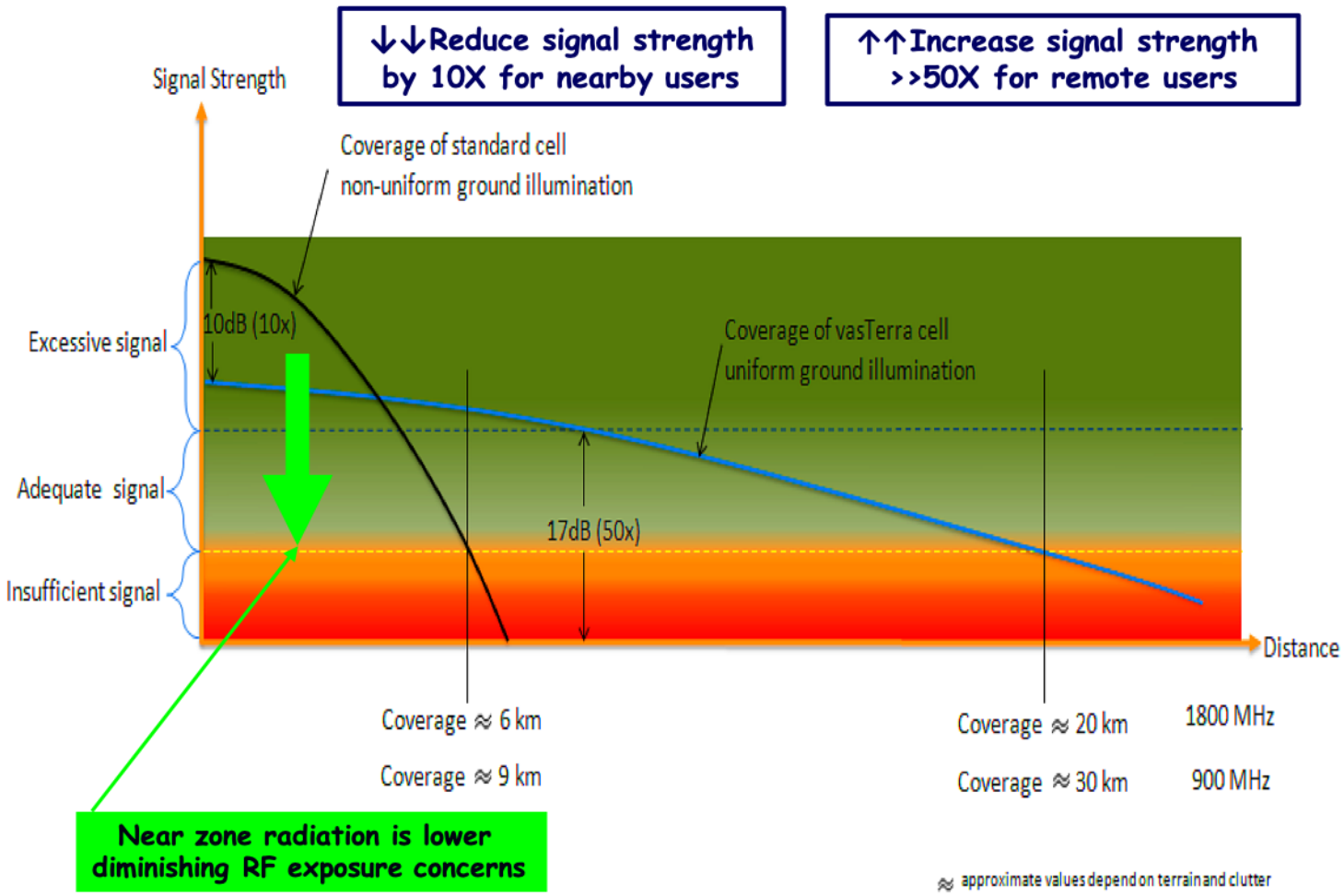
TYDACOMM's tailored solutions utilize an advanced Long-Range Antenna System or dL-RAS, this system is truly innovative and unique to the global market. TYDACOMM's tailored solutions are unmatched by any traditional antenna system in the market today. We fully analyze the area of interest (AOI) and provide a customized solution, reducing OPEX, and increasing revenue and ROI.

TYDACOMM designed this system to maximize operator revenue while reducing OPEX in low population areas (hence low traffic and low margin), as well as populated metropolitan areas where maximum capacity & better indoor coverage is needed.

TYDACOMM has developed 4 primary solutions to address the different market applications LMS - Low Margin Sites, UMS - Urban Metro Sites, IHS – Inter Highway Sites & RGS - Rural Green Sites. These applications are available in Low Band (790 - 960 MHz), and High Band (1710 - 2390). These applications have gain ranging from 19dB to 30dB, yielding coverage areas of 30 kms, and our solutions support all 2G, 3G, 4G technologies.

The key fundamentals of TYDACOMM's solution utilize the Robin Hood Theory, in which through the methodical distribution of phases and amplitudes of the system we redirect power from the near field and transfer it into the far-field extending the range and signal strength to up to 10x over a standard solution.

Figure 1. Field Strength Distribution of LRAS Cell vs. Standard Cell



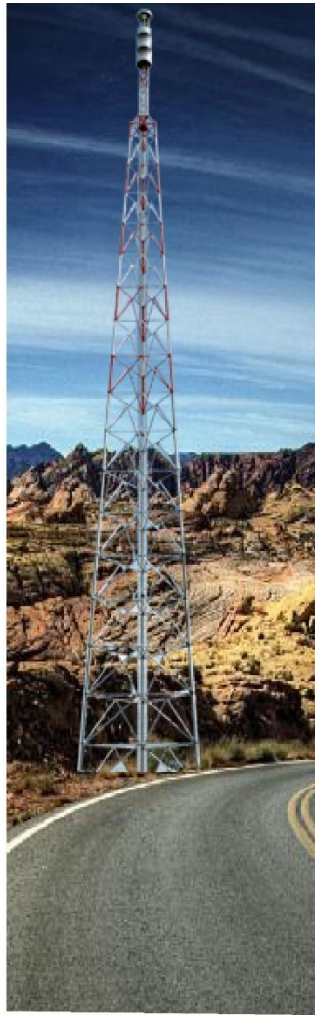
Rural Green Sites (RGS)

- *Designed To Maximize Revenue At Lower Operating Costs In Low Population-density Areas*
- *Delivers Extraordinarily High Coverage—up To 10 Times More Than Standard Antennas*
- *It is Technology Agnostic, hence, we support ALL Standards (2G, 3G, 4G and beyond). The only restriction is frequency bands.*
- *We currently have products for LB 800/900 MHz, HB 1700 - 2400 MHz Bands (being released)*
- *High Gain Of Up To 30dBi*
- *Configured In A Six-sector Solution Characterized By A Near 1% Vertical Beam width With High Front-to-Back Lobe Ratio Greater Than 40dBi*
- *20/ 10 m High; Mounted On Our Proprietary Super Efficient Tower (SET).*

Low Margin Sites (LMS)

- *Meant for extending coverage of an existing tower or extended coverage on standard towers, primarily in Sub Urban & Rural Areas*
- *Useful solution for Hole Filling in Countryside Networks (coverage limited areas)*
- *Typically 2.5 m to 5 m high and can be mounted on existing Rooftop or stand alone Towers, typically 40 to 70 m towers*
- *Gain depends on Application typically ranging between 21 & 24 dB*
- *Solution with 4° - 8° vertical beam width*
- *Higher Spectrum utilization for improved RMS & CMS*
- *In a cluster, site savings could be up to 1:3, for coverage limited sites*
- *High capacity possible with increased sectors and or increased carriers*

Inter - Highway Site (IHS)



- *Used to provide coverage along Highways and Railroads*
- *Can support inter site distances between 30 – 50 Km depending on Frequency Band using our Super Efficient Towers (SETs)*
- *Can also be mounted on existing Towers depending on need*
- *Between 2 Sector to 6 Sector support*
- *Minimum 24 dBi Gain with support for both electrical and mechanical tilt*
- *Most cost effective method to cover highways & railroads ubiquitously*

Urban Metro Site (UMS)

- *Usually deployed with High Band Products 1700 -2400 MHz in Urban Markets*
- *2.5 m high usually mounted on existing Rooftop or Ground Based Towers*
- *Vertical Beam width 4° and Horizontal Beam width 38° or 65° (6 / 3 sector operation)*
- *High number of input ports, typically 4 or more to support multiple radios (capacity)*
- *Superior indoor penetration supporting high capacity*