

# **Private 5G Seminar**



### **Private 5G Seminar Overview**

Our Private 5G seminar is the most comprehensive and the only seminar of its kind in the US mobile industry.

The Besen Group estimates that the US private 5G market will grow at a compound annual growth rate of 42% between 2021 and 2025 due to the commercial availability of 5G SA in 2021 and availability of additional licensed spectrum, shared spectrum and unlicensed spectrum. The Besen Group defines private 5G as a dedicated network for consumers, businesses, and Internet of Things.

It contains three sessions and a customized business case workshop. The first session provides an insight to private 5G Go-To-Market Strategy and the key elements of the private 5G network business plan. The second session contains private 5G use cases from multiple vertical segments from domestic and international organizations. The third session contains case studies from market players in the private 5G market.

Our seminar is offered virtually or at our clients' locations with 3 weeks advance notice. Depending on our client needs, we can customize the seminar to fit their go-to-market strategy by executing a Non-Disclosure Agreement.

## Session I: Private 5G Go-To-Market Strategy

#### ■ Private 5G Market Research

- Determining the total addressable market opportunity for private 5G
- Identifying the key vertical market segments and use cases for private 5G
- Evaluating the key channel partners and vendors in private 5G ecosystem
- In-depth look at private 5G deployment examples from Europe and Asia
- Examining European mobile network operators' private 5G solution offering

### ■ Private 5G Spectrum Options

- Identifying licensed spectrum, shared spectrum and unlicensed spectrum options
- Comparing mobile network operators' 5G spectrum in low, mid and high bands
- Calculating CBRS PAL spectrum wholesale pricing based on census tract basis
- Evaluating CBRS PAL spectrum leasing pricing based on county basis

### ■ Private 5G Deployment Models

- Deploying physically-isolated private 5G network based on enterprise spectrum selection
- Deploying private 5G network based on mobile network operators' 5G network and spectrum
- Understanding key drivers for on-premise vs cloud deployment for different use cases per segment

### ■ Mobile Edge Computing & Network Slicing

- Developing mobile edge computing architecture that enables low-latency and efficient use of servers
- Designing flexible and adaptable mobile edge computing applications at the network edge
- Creating step-by-step network slice to generate new revenue generating services
- Configuring business support systems to support network slicing and new services

### ■ Private 5G Go-To-Market Strategy

- Performing market and competitive analysis for vertical market segments
- Analyzing different connectivity technologies including Wi-Fi6, Private LTE and Private 5G
- Evaluating key channel partners and vendors for vertical market segments based on SWOT analysis

### ■ Private 5G Business Plan

- Identifying the target vertical segment market size and coverage parameters
- Building the dimension engine for private 5G network in order to calculate the number of small cells
- Developing Capex inputs for indoor or outdoor private 5G network based on go-to-market strategy
- Developing Opex inputs for indoor or outdoor private 5G network based on go-to-market strategy
- Calculating the total cost of ownership for private 5G network with financial indicators

### Session II: Private 5G Use Cases

**Energy**: Chevron

Autonomous Vehicles: Horiba Mira

Mining: Baodian Coal MineManufacturing: Tesla

■ Smart Ports: Port of Los Angeles, Port of Antwerp

### Session III: Case Studies

■ Mobile Operators: AT&T, T-Mobile, Verizon

Cloud Vendors: Azure, AWS, Google Cloud

■ Core Vendors: Ericsson, Mavenir, Nokia, Samsung

■ RAN Vendors: Airspan, Cisco, JMA Wireless

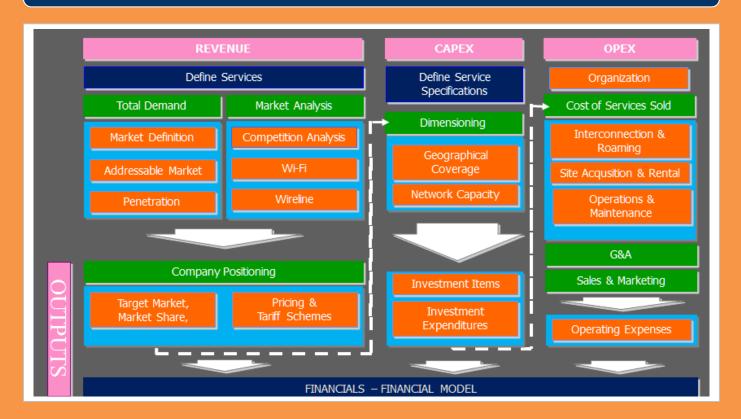
Open RAN Vendors: Altiostar, Mavenir, Nokia

**SAS Vendors:** Commscope, Federated Wireless, Google

■ System Integrators: Accenture, IBM, Infosys

■ Enablers: Geoverse, Celona, Limitless Mobile

## Private 5G Business Case Development Workshop



#### **About The Presenter**

<u>Alex Besen</u> is the Founder & CEO of The Besen Group LLC. He provides strategic advisory, business development, market research and training services in the mobile data industry.

Alex has over 26 years of hands-on experience in the mobile industry working for operators and vendors in North America and Europe in numerous roles including business development, marketing, project management and finance. He has been working with mobile network operators and enterprises in developing their digital transformation strategies and advising MVNOs to launch their mobile and mobile data services.

Previously, Alex worked at Ericsson with mobile operators on MVNO and UMTS projects in the EMEA (Europe, Middle East and Africa) region. He was also responsible for identifying potential partners and hosting workshops at Ericsson Mobility World (a mobile data laboratory) where developers create, optimize and commercialize mobile applications. Prior to Ericsson, Alex was employed at T-Mobile USA (Omnipoint Communications) where he was responsible for partnerships, joint ventures and provided billing, customer care, marketing and financing solutions to mobile operators. Alex began his mobile career with Pocket Communications based in Washington DC where he managed the company's auction activity for C-block spectrum licenses as well as other activities associated with market research, market segmentation, pricing plans and market distribution strategies.

He holds a BS degree in Management from the University of Tampa and an MBA degree in International Business from the American University. He is in fluent in French, Turkish and proficient in Italian.

He has delivered a 4G LTE wholesale seminar to International Telecommunications Union (ITU) in March 2012, Cellular Telecommunications Industry Association (CTIA) in January 2011, Competitive Carriers Association (CCA) in December 2010 and Federal Communications Commission (FCC) in October 2010.

He has spoken at MWC Los Angeles 2019, In-Building Wireless Congress 2019, CCA – Mobile Carriers Show 2019, CCA – Mobile Carriers Show 2018, Mobile World Congress Americas 2017, CES 2017, CTIA Super Mobility 2016, Wi-Fi Now USA 2016, CCA - Mobile Carriers Show 2016, CTIA Super Mobility 2015, Sprint Mobility in Action 2014, MVNO Industry Summit USA 2013, MVNO World Congress 2013, CCA Global Expo 2013, MVNO Industry Summit 2012, MVNO Industry Summit 2011, MVNO Industry Summit Latam 2011, LTE North America 2010, MVNO Industry Summit 2010, Eurasia Com 2009, Mobile World Congress 2008, MVNO Summit 2008, MVNO Summit 2007, MVNO Congress 2007, Emerging Mobile Partnerships & MVNOs Conference 2007, CTIA Wireless 2006, and CTIA Wireless 2005.

He was quoted in AGL Media, Bloomberg, Boston Business Journal, Business News Americas, Business Week, CableFax, Chicago Tribune, CNN Business, Computer World, Connected Real Estate Magazine, FierceWireless, Hurriyet, Information Week, Le Journal du Net, Light Reading, Los Angeles Times, MIT Technology Review, New York Times, RCR Wireless, Red Herring, S&P Global, Telephony Online, The Kansas City Star, The Prepaid Press, The Seattle Times, The Washington Post, Triangle Business Journal, USA Today and Wireless Week.

### **About The Besen Group**

The Besen Group LLC is an international management consulting practice to the mobile data industry headquartered in the Washington DC area, with representatives in Paris and Tokyo.

The Besen Group brings global perspective and an open approach to client engagements, where the transfer of our mobile data knowledge, hands-on experience, and strategic thinking become part of our clients' ongoing competitive strength. Its mission is to provide mobile data players with tools, knowledge, and services enabling them to perform optimally in their mobile environment. The Besen Group's competitive edge is based on practical experience with mobile operators, mobile vendors, and a mobile data laboratory.

Our references include Altran, Amdocs, Arterra Mobility, BICS, Cosmote, Ericsson, Fenerbahce, Globalstar, Ligado Networks, Limitless Mobile, MTS, Nokia, Orange, Panasonic, Plintron Americas, Reglo Mobile, Speedcast, Sprint, T-Mobile US and Turk Telekom.

Our consulting service portfolios include: <u>Mobile Data Service Portfolio</u>, <u>MVNO Service Portfolio</u>, <u>MVNE Service Portfolio</u>, <u>MVNE Service Portfolio</u>.

Our training seminars include: <u>Private 5G Seminar</u>, <u>Private LTE Seminar</u>, <u>CBRS Seminar</u>, <u>Mobile Wholesale Seminar</u>, <u>MVNO Seminar</u>, <u>Cable MVNO Seminar</u>, <u>US MVNO Seminar</u>, and <u>MVNE Seminar</u>.

Our market research services include: Case Study Brochure, and Market Research Brochure.

### **Pricing**

#### Private 5G Seminar includes:

Session I: Private 5G Go-To-Market Strategy

Session II: Private 5G Use Cases

Session III: Private 5G Case Studies

■ Workshop: Private 5G Business Case Development

For pricing information, please send an email to: <a href="mailto:seminar@thebesengroup.com">seminar@thebesengroup.com</a>.

The seminar price is for unlimited number of participants. The seminar price will vary for a customized seminar.

The duration of the seminar can be one day or half-day. Customers will be responsible for all travel related expenses including air, transportation, and lodging for the presenter.

In case, customers will need a training facility, all Regus business center expenses will be billed additionally.

### **Payment**

Full payment is required prior to the scheduled seminar date.

All payments should be made by check, wire transfer or major credit card.

To arrange for a wire transfer, please contact us at +1.703.981.8168 or by email to: seminar@thebesengroup.com.

### **Scheduling**

To schedule a seminar, please send your request to: <a href="mailto:seminar@thebesengroup.com">seminar@thebesengroup.com</a> with your contact details and availability.

For a customized seminar, please contact us at +1.703.981.8168 or by email to: <a href="mailto:seminar@thebesengroup.com">seminar@thebesengroup.com</a>.

### Cancellation

All cancellations must be in writing. Cancellations received two weeks prior to the scheduled seminar date won't be responsible for any service charge.

A service charge of \$1,000 will apply to cancellations received less than two weeks prior to the scheduled seminar date within North America and a service charge of \$2,000 for all other international countries.

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