

Spectrum Auction Training

For Network Operators

Training Focus

This three-day course is designed to allow operators who plan to participate in upcoming spectrum auctions the unique opportunity to participate in simulated auctions before the actual auction. This lab opportunity allows bidders to test their strategies in a simulated environment using software that can be set up to follow various leading auction designs and bidding rules. When it comes to spectrum auctions, knowing the rules is not enough. During the simulations your team will learn how to effectively participate in the auction and potentially save millions. Saving a single increment in the auction can mean a 10-20% savings for valuable spectrum. Instead of sitting around a conference room talking about "what ifs", why not simulate the scenarios and refine your strategy before the auction using software that implements the specific rules established by regulator.

Course Objectives

After the training, participants will be better equipped to participate in the upcoming 3G and 4G spectrum auctions that are being planned around the world. Even if you have already participated in a spectrum auction, you can learn valuable insight into upcoming auctions by participating in a series of realistic simulations that assume high, medium and low demand scenarios. Participants will get hands-on experience participating in a set of simulated auctions and will be well equipped to develop and implement bidding strategies based on the actual demand in the auction. Participants will get experience managing eligibility, forecasting demand in future rounds, setting and implementing bidding strategies, and gracefully exiting the auction.

Suitable for

The course is designed for telecommunications professionals wanting to learn first-hand how to create and implement winning spectrum auction strategies participate in the upcoming 3G and 4G auctions.

Prerequisites

General knowledge of radio spectrum.

Contents

- Discussion of auction designs and their trade-offs
- Set up for auction simulations
- Group simulations
- Results review
- Wrap up question and answer period

Course Fee 1,790€ (excl. VAT)

The course takes place from March 22nd until 24th, 2010 at our Headquarters in Lichtenau/Germany.



How KBE/LS telcom can help your company effectively participate in a spectrum auction

Why do I need help; the rules seem simple enough?

Participating in a simultaneous multiple round auction is easy; winning at the lowest cost is difficult. How you participate in a spectrum auction can mean paying 10 to 50% less or conversely 10 to 50% more than your competitors. You won't find the answers in the official rules. Effective participation in a simultaneous multiple round auction takes practice. Consider the following recent examples in US spectrum auctions where bidders used KBE advisors and software tools to fully win in the auctions.

1. KBE founder, Karen Wrege advised a consortium of cable companies (known as SpectrumCo) in the Advanced Wireless Services (AWS) auction in the US, who saved nearly \$1.2 billion on their spectrum license purchases (based on the prices paid by other bidders in the auction) by leveraging the auction rules to their advantage.
2. In the US digital dividend (700 MHz) auction, KBE advised Verizon Wireless and provided both simulation and bid tracking software, that allowed them to win the coveted 20 MHz nationwide C Block for a fraction of the cost of other comparable spectrum in other blocks. Verizon was able to win this spectrum by using a strategy that we tested using simulation software whereby they bid on small licenses early in the auction to maintain their eligibility and moved to regional licenses later in the auction when the competition had exited those areas. They bid up the price of the smallest region to block other entrants from following them into the larger licenses and ended up winning the licenses for US\$0.75 per MHz-pop, a considerable discount over the comparable nationwide licenses in the A and B blocks which sold for US\$1.15 and US\$2.67 per MHz pop, respectively.

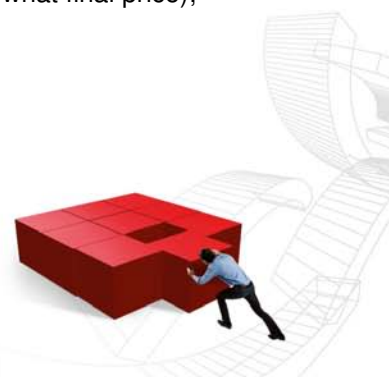
Don't recreate the wheel; proven software is available already to help you effectively plan and participate in a spectrum auction.

KBE created auction simulation tools and scenarios that were sold to multiple Fortune 500 companies including Comcast Cable, Verizon Wireless, Telephone and Data Systems, Inc. (TDS), and Itron, Inc. to help bidders participate more effectively in FCC spectrum auctions of advanced wireless services at 1.9 and 2.1 GHz and 700 MHz spectrum freed up by the digital transition.

Prepare to win by using KBE Global Spectrum Auction Software (GSAP):

KBE's auction software and technical platform, the Global Spectrum Auction Platform („GSAP“) can be used off-the-shelf for auction simulations. The tool can help your bidding team develop a bidding strategy to address the following strategic decision points:

1. How to manage your eligibility early in the auction (including where to bid and to what final price);
2. When to move to your „must have“ target markets;
3. When to start bidding on your second tier markets;
4. How to manage your eligibility during the stage transition;
5. How to gracefully exit specific auctions.



Develop simulation cases and conduct simulations:

KBE will develop simulation cases based on your business objectives, competitive analyses and auction rules. Once developed, KBE will use its Global Spectrum Auction System (GSAP) to simulate the auction and allow the auction team to participate in live auctions and test the scenarios and simulation cases along with testing operational procedures. The bidding team members will take on the roles of different bidders in the auction and will use the Bid Explorer bid tracking tool to formulate bids in each round. The simulations will allow the bid team to experience first hand and practice their bid strategies before the actual auction. The simulations will include mid- and high- demand scenarios and will allow the bid teams to experience eligibility and activity rules, stage transitions, demand and price tracking using the KBE Bid Explorer tool, and exiting the auction.

KBE Experience:

KB Enterprises LLC (KBE) is a consultancy providing telecommunications policy consulting as well as auction design, software implementation and bidding analysis services. KBE's founding partners Karen Wrege and Brett Tarnutzer together have over 36 years of experience in telecommunications policy and auctioning government assets.

Since 1991 KBE members have designed and implemented high stakes auctions of various commodities including financial instruments, telecommunications spectrum, and energy. They have developed and implemented eight auction software platforms using various auction rules including simultaneous multiple round, ascending and descending clocks, and complex combinatorial auctions. At last count, the auction programs they have developed and implemented have encompassed 79 high stakes auctions with proceeds of nearly US\$78 billion.

KBE has vast experience in providing software tools and advising bidders in spectrum auctions. Clients include Verizon Wireless, Comcast Cable, Time Warner Cable, Advance Newhouse, Cox Cable, Bresnan Cable, US Cellular (a division of TDS), and Cavalier Wireless.

KBE members also have a long and distinguished background in wireless telecommunications policy beginning with work on the creation of the rules for the FCC's Personal Communications Service (PCS) in 1994. KBE recently completed a study of technical and policy issues relating to spectrum liberalization in seven countries around the world for the GSM Association and conducted a study on the application of spectrum auctions in the developing world for the Soros Foundation. Most recently, KBE developed recommendations for assigning 2.6 GHz spectrum in South Africa for the Shuttleworth Foundation.



Brett Tarnutzer and Karen Wrege

