



National Capital Region Rebanding



Location:

Washington D.C., Virginia,
Maryland, USA



Business Needs:

To ensure communication between the D.C. area and the 14 surrounding counties that make up the National Capital Region, while adhering to the FCC rebanding order.

Customer Profile

The National Capital Region (NCR) of the United States consists of Washington, D.C. and the surrounding fourteen counties and independent cities in Maryland and Virginia. Home to over six million residents the NCR is the sixth-largest metropolitan area in the nation, and the largest in the South Atlantic division. The region responsible for protecting the homeland requires constant connectivity between the municipalities within its borders.

Customer Challenge

The Federal Communications Commission's implementation of a complex, multi-year transition plan to mitigate interference in the 800 MHz band by separating cellular systems and public safety systems into different portions of the band. NCR licensees maintain communications with each other, adjacent counties and a multitude of cities and districts within the NCR which would be impacted by rebanding. Successful transition of complex systems of this magnitude required skillful coordination. This was also an opportunity for these jurisdictions to better define their interoperability protocols through the development of a common fleetmap. Commdex collaborated with the Communications System Managers and Communications Directors of jurisdictions within the NCR as well as the Motorola Project Team and Supervisory Staff in implementing a state-of-the-art solution, satisfying their frequency rebanding, interoperability and systems migration needs.

Commdex Solution

- Retrieve interoperable templates for each licensee as per the FCC rebanding guidelines
- Fleetmapping
- Retrieve interoperable templates for each licensee as per the rebanding guidelines
- Enabled licensees to extract radio inventory data from code



2400 Herodian Way, Suite 360
Smyrna, GA 30080



sales@commdex.com
www.commdex.com

CommDEX Roles

CommDEX provided consultation in development NCR Program Plan during Phase I of the project. During Phase II, CommDEX provided program management guidance and structure for each of the NCR Licensees' rebanding projects to be certain that the NCR Program Plan developed in Phase I was followed. To this end, CommDEX managed and updated the NCR Master Project Plan to ensure that the implementation followed the regional schedule and that consistency of work was maintained across each of the NCR Licensees' rebanding projects. CommDEX created a master implementation plan that included program governance, stakeholder management, benefits management and risk management.



CommDEX analyzed the existing processes and systems in place and proposed an optimized solution and design to improve efficiency, productivity and scalability. In order to harvest the data from existing radio templates in a quick and effective manner, CommDEX designed and implemented a software solution to:

- Retrieve interoperable templates for each licensee as per the rebanding guidelines, and also maintain/track the licensee data for billing and reporting purposes.
- Automated the data collection and transformation process from all systems thereby reducing the manual data collection effort by 75%
- Designed and developed database to hold template, radio and system information.
- Provided user interface for querying licensee information and generating various reports to eliminate manual records and improve the billing accuracy by 45%.
- Enabled licensees to extract radio inventory data from code plug exports which reduced turnaround time by 65

CommDEX Roles

CommDEX provided the engineering support required to modify the interoperable subscriber templates to accommodate the changes needed for rebanding for each Licensee. CommDEX performed internal validation of the data modified in the interoperable templates before the codeplugs were turned over to the customer(s) for acceptance. The changes made to each interoperable template were carefully reviewed against the certified and accepted Rebanding Template Impact Report. CommDEX used Ultra-Compare tool to quickly find differences between similar codeplugs which reduced Quality Assurance time and increased overall accuracy and efficiency. As a final step, CommDEX tested the interoperable templates needed for both the First Touch and the Second Touch radio reprogramming efforts.

About CommDEX:

CommDEX provides network solutions to telecommunications service providers and manufacturers for the deployment of telecom networks, facilities and supporting systems. CommDEX specializes in designing and implementing mission critical voice and data networks over Wi-Fi, microwave, land mobile radio and other technologies. CommDEX offers a broad, rich portfolio of proven telecom solutions. Its solutions, services and methodologies have been tested and proven in hundreds of customer environments. Its customer base ranges from state, local and federal customers, to large enterprises and equipment manufacturers.

Connect With Us:



2400 Herodian Way, Suite 360
Smyrna, GA 30080

P:770.349.0400
www.commdex.com