

## Blue Danube Systems collaborates with Rohde & Schwarz to accelerate massive MIMO commercial deployments

***Rohde & Schwarz QualiPoc Android platform enables comprehensive characterization of mobile data and video performance gains from Blue Danube's BeamCraft™ 500 Massive MIMO system in multiple FDD LTE networks***

Columbia, MD, February 22, 2018 – Rohde & Schwarz and Blue Danube Systems announced today that the Rohde & Schwarz QualiPoc smartphone-based mobile network optimization platform was recently used to characterize performance at multiple commercial LTE deployments of Blue Danube's BeamCraft 500 advanced massive MIMO system. Built on its High Definition Active Antenna System (HDAAS™) technology, BeamCraft products dramatically improve data capacity of existing LTE networks by dynamically directing radio frequency (RF) beams where mobile traffic is highest and enhancing user experience on today's smartphones. Through the unique level of control of its 96 active antenna elements, the BeamCraft 500 provides ultra-sharp RF energy control, enabling unprecedented resolution of hotspots and optimization of cell edges.

In each of these deployments, Rohde & Schwarz's QualiPoc Android platform was used to perform sophisticated test functions for voice, data, and video to capture the real end user experience on mobile radio networks in real-time. The comprehensive technology captures the current network situation on the same devices used by end users, thus providing a true, authentic map of the performance of the mobile radio network and its services offered. Utilized in conjunction with Blue Danube's cloud-based software platform BeamPlanner™, QualiPoc validated gains as high as 10X in average throughput and up to 20X in dynamic video performance in live FDD-LTE networks. By mapping performance over multiple sectors, QualiPoc additionally confirmed signal quality improvements of up to 7 dB were achieved for average video traffic at cell edges without increasing power requirements.

"Massive MIMO offers significant gains in wireless data rates and link reliability, allowing for video consumption from more users in a dense area without consuming any more radio spectrum or causing interference," said Mihai Banu, CTO at Blue Danube. "The Rohde & Schwarz QualiPoc platform allows us to accurately characterize the performance of our massive MIMO systems and intelligent network optimization software."

"Measuring subjective service quality is a challenging task that requires expertise and specialized knowledge. More than half of today's data traffic is driven by increasingly pervasive video apps. 5G will take this to even a higher level. As the premier handheld troubleshooter, QualiPoc Android is well positioned to meet the testing needs of both today and the future as we move towards 5G," said Hanspeter Bobst, Vice President of mobile network testing at Rohde & Schwarz.

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**Rohde & Schwarz**

The Rohde & Schwarz technology group develops, produces and markets innovative information and communications technology products for professional users. Rohde & Schwarz focuses on test and measurement, broadcast and media, cybersecurity, secure communications and monitoring and network testing, areas that address many different industry and government-sector market segments. Founded more than 80 years ago, the independent company has an extensive sales and service network in more than 70 countries. On June 30, 2017, Rohde & Schwarz had approximately 10,500 employees. The group achieved a net revenue of approximately EUR 1.9 billion in the 2016/2017 fiscal year (July to June). The company is headquartered in Munich, Germany, and also has regional hubs in Asia and the USA.

All press releases are available on the Internet at <http://www.rohde-schwarz.us>.  
A press photo for download is also provided there.

**About Blue Danube Systems**

Blue Danube Systems is a privately held start-up backed by Sequoia Capital and Silver Lake along with other investors including AT&T. Blue Danube's unique, award-winning technology combines intelligent software and hardware into a Massive MIMO solution that enables a significant increase in network capacity, utilizing existing infrastructure and today's mobile devices. For more information, please visit [www.bluedanube.com](http://www.bluedanube.com)

**Blue Danube Participation at Mobile World Congress 2018**

Blue Danube will have representatives at Mobile World Congress from February 26 through March 1 in Barcelona. Blue Danube can be found in Hall 2, hospitality stand 2L10

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