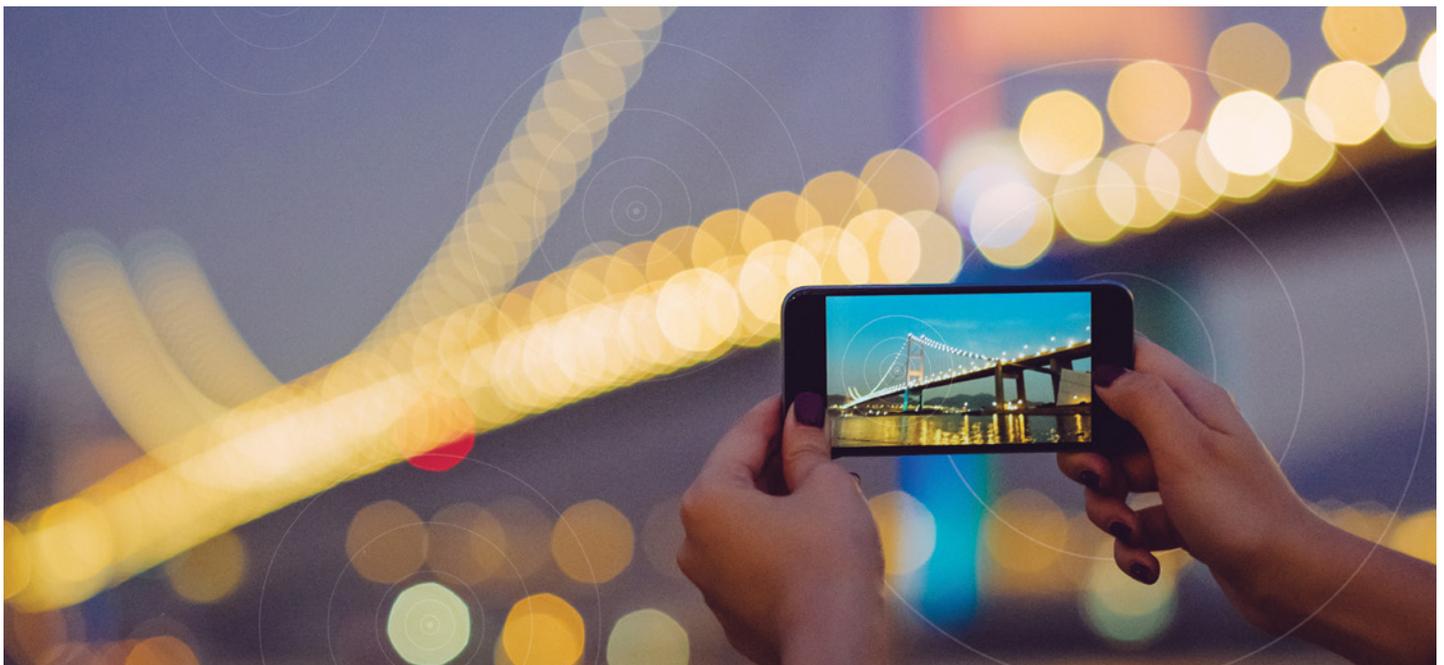


Keeping success on schedule in Asia



One of the largest mobile wireless operators in Asia was poised for yet another growth spurt in late 2012.

When an interference issue threatened the nationwide launch of their enhanced 3G service, the carrier took swift action to keep their strategy on schedule.

Since 2010, the carrier has made excellent use of its 900 MHz frequency band via a solid, profitable 2G network. In 2012, the carrier made plans to re-farm a significant portion of its 900 MHz bandwidth to support its new enhanced 3G service. However, a situational analysis indicated

a potential deal breaker—adjacent channel interference. With little room in the schedule for error, the operator called on CommScope to help solve their interference issue.

Meanwhile, a second carrier detected the same interference as well. Further analysis traced both carriers' interference problems to the same source—an offending third operator. The two affected operators agreed to collaborate in order to solve the problem. In late 2012, CommScope's RF Conditioning team met with network engineers from both carriers to conduct a detailed needs analysis and outline each carrier's specific performance targets.

The interfering carrier's out-of-band transmissions were originating from the 850 MHz band and leaking into the 900 MHz receive band of both victim carriers. Interference levels were moderate to severe depending on the location, with the worst cases being detected at co-located sites. The problem threatened cell capacity and, potentially, revenues.

CommScope wasted no time designing a solution using its interference mitigation filter (IMF) technology. The IMF solution consists of two key components. The first is a customized standalone 900 MHz band-pass filter designed to work with the radio receivers of both carriers to reject the interfering 850 MHz signals. The second component consists of four customized tower mounted amplifiers (TMAs) and three customized combiners, each with integrated interference rejection.

The timeframe from the initial meeting to prototype approval was exceedingly tight, but CommScope made it happen. Both carriers reported significant improvements in their UMTS 900 MHz service



with the first IMF solution installation. In addition, the TMAs and combiners enabled them to reduce the amount of hardware needed.

More importantly, the project's success enabled one of the world's most robust multiband networks to continue expanding. They later announced plans to extend their 4G footprint, providing services across various markets in Asia. With CommScope as their interference mitigation expert, they are well positioned to continue growing within Asia's competitive wireless arena.

CommScope pushes the boundaries of communications technology with game-changing ideas and ground-breaking discoveries that spark profound human achievement. We collaborate with our customers and partners to design, create and build the world's most advanced networks. It is our passion and commitment to identify the next opportunity and realize a better tomorrow. Discover more at commscope.com

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