

Verizon's Spectrum Sale Plans To Kill Interoperability: Deny Verizon SpectrumCo

Verizon Wireless has pretty much damaged any possibilities of LTE being adopted globally to provide subscribers in the U.S. the freedom to change carriers and a decent range of compatible mobile devices to make a choice on. The company's intention of selling all its 700MHz frequencies to create an entirely new private band for itself implies that mobile companies like Apple will have to specially make phones just for Verizon's network.

While LTE was supposed to establish a uniform 4G network, the carrier industry is as broken up as one can imagine. The 700 MHz band in the electromagnetic spectrum has been cut up and divided into any and every arrangement that these companies could come up with.

The "upper C block", a bunch of airwaves in which the uplink and downlink frequencies are interchanged in use, was acquired by Verizon in 2008 and is being used to launch its first LTE phase. However, for devices to work on this bandwidth, makers need to incorporate certain elements in their radio chips, and that may prove costly. Along with the C block, Verizon also bought a chunk of A and B-block licenses to run its network in metropolitan areas, where these bandwidths were supposed to cater to the higher demand. However, to implement these would mean the use of extra effort and capital.

Many other operators also own spectrum in the lower 700 MHz band, implying any device Verizon obtained to work across its bands, would also work on its LTE networks as effectively. However, Verizon, now, can exclusively occupy the upper half of this band, if it dumps the lower frequencies. In fact, the company's calculations could mean that Verizon will buy up a friendlier spectrum, Advanced Wireless Service (AWS) working at 1700-2100 MHz, from Big Red, along with a regulatory approval of these airwaves.

The national and tech media have shown Verizon's planned auction as an allowance from the Federal Communications Commission and the U.S. Department of Justice to approve of its AWS procurement, though this has been denounced as plain gibberish. Verizon had probably bought the lower frequencies as backup and now wants to sell them off in exchange for the AWS band. AT&T is also trying to move above the others by acquiring its own B and C-block certificates. Technical reasons behind this impending move could be the potential use of certain complex 700MHz parts, as a part of its super-LTE plan, while to also avoid A-block interferences. The net result of this will be that all other carriers cannot use its iPhones and other Apple and Samsung models under their own network.

While the FCC may not allow Verizon to go ahead with its plans, the future looks like the airwaves are being divided into three bands within 700MHz: Verizon's, AT&T's and one more for the other carriers.