

New spectrum policy

“White space” to be opened to devices connected to web

—by Cecilia Kang

Preachers on the pulpit, Guns N’ Roses, and others who fear their wireless microphones would be disrupted by widespread public access to certain unused airwaves were drowned out by high-tech titans Google and Microsoft in a federal ruling on November 4th.

The Federal Communications Commission approved a plan that would allow those airwaves, called white spaces, to be used by gadgets such as cellphones and laptops connected to the Internet, once that spectrum becomes available after the national transition from analog to digital television in February.

Opponents of the plan, including preachers and entertainers, say such devices could interfere with broadcast channels on nearby spectrum and with wireless microphones, which are used in live performances and operate on the same frequencies.

The plan’s proponents, including Google and Microsoft, say it would open more wireless technologies to consumers. “Part of why I’m here,” said Google’s co-founder Larry Page earlier in the year, “is I don’t want people to be misled by people who have interests. I’m really bothered by that,” Page said. According to Google, there’s a huge opportunity to “make this stuff work.”

Without doubt, the ruling represents a huge opportunity for Google, which gets back to why the company even got involved in telecommunications policy in the first place. The more open high-speed wireless connections are, and not controlled by rules and conditions by carriers such as AT&T and Verizon Wireless, the greater access Google will have to wireless broadband users.

Page’s push on white spaces is the company’s latest move to influence telecommunications policy. Last summer, Google helped convince the FCC to auction a large portion of nationwide spectrum with a condition that the network be open to all devices and software applications. It has also pushed for an open mobile platform called Android to be adopted by device makers and used on all networks. Earlier this month, it agreed to invest in WiMax venture Clearwire, which will be deployed as an open high-speed wireless network.

Microsoft Chairman Bill Gates and Google’s Sergey Brin and Larry Page had personally lobbied FCC commissioners on the airwave issue, saying that use of the valuable radio waves—which can penetrate buildings—could unleash a wave of innovation in wireless technology. The high-tech firms liken the spectrum to WiFi on steroids and say that the industry will benefit as more people use the spectrum to surf the web and as they buy smartphones, digital music and video players, laptops and other devices that connect to the networks.

“White spaces are the blank pages on which we write our broadband future,” said Democratic Commissioner Jonathan Adelstein during the meeting. “Let’s hope this is not just WiFi on steroids but WiFi on amphetamines as well because it will be that fast.”

Public interest groups lauded the decision, saying the use of white spaces would provide an alternative to what is being offered by telecom giants AT&T and Verizon Wireless. “This



means that by Christmas 2010, I’ll be able to go into a Best Buy and will have more things to choose from that are faster, better, and cheaper than what’s available now,” said Ben Scott, policy director at public interest group Free Press.

But a wide and varied group of critics, including broadcast executives, Broadway producers, The Walt Disney Co. and ministers, warn that the use of unlicensed portable devices on that spectrum could cause interference on broadcast channels and wireless microphones used for sermons, university lectures and live performances.

Silicon Valley giants such as Google and Hewlett-Packard said the FCC’s office of engineering had tested devices and found no real interference, even as dozens of lawmakers pushed the agency to allow for comment on the proposal and a more thorough review of the FCC’s findings.

“Normally, the Commission adopts prospective rules about interference and then certifies devices to ensure they are in compliance,” Martin said in a statement. “Here, we took the extraordinary step of first conducting this extensive interference testing in order to prove the concept that white space devices could be safely deployed.”

The FCC also approved Verizon Wireless’s merger with rural carrier Altel, and Sprint Nextel’s merger with wireless broadband provider Clearwire. Also approved after last-minute wrangling over details were one merger that would consolidate the cellphone industry and another that could provide an alternative broadband wireless competitor. The agency approved Verizon’s \$28.1 billion purchase of Alltel, which would form the nation’s largest cellphone operator, with 83.8 million subscribers. AT&T has 74.9 million customers. Martin said the four other commissioners were negotiating down to the wire the roaming conditions attached to the merger.

As part of final negotiations, Verizon expanded its agreement with rural carriers on roaming. Previously, it said it would maintain roaming agreements with rural carriers that use Alltel’s networks for the remainder of customers’ contracts or for two years, whichever is longer. Under the final order, Verizon will maintain those contracts for four years or the remainder of customers’ contracts, whichever is longer.

Public interest groups had balked at the mergers, saying it would hurt consumers by providing them with fewer choices of carriers and possibly higher prices. They also suggested that Verizon over time would raise the rates it charges the rural carriers to roam on its network.—Which leaves all of us using Verizon with the task to watch our bills closely!