

munications Council. The FCC order, if approved, will help minorities because they're more likely to own an AM station than an FM or TV station, said Honig. He agreed with Kalil that interest in AM stations is "brisk," but said financing is hard to find. "The AM stations that minorities own, tend to, on average, to have inferior signals," said Honig. "Minorities got in late so they didn't have the chance to buy the high-quality signals." -- *Jonathan Make*

Green Agenda

3GPP Finalizes LTE Standards; 4G for Public Safety Expected

Standards group 3GPP has finalized the standardization of Long Term Evolution and 4G standard updates, which address public safety systems, are well under way, speakers said in a Tuesday webinar hosted by the Alliance for Telecom Industry Solutions. Femtocells are expected to be part of carriers' LTE deployment, they said.

The basic specification for commercial LTE deployment is done, said Adrian Scrase, head of the 3GPP Mobile Competence Center. A new specification in the works is 3GPP Release 9, which covers the LTE interoperability standard, femtocell integration, a public warnings system, voice support in LTE and registration in a densely-populated area, he said. The standard will be completed by year's end. Standards for LTE-Advanced, a major enhancement of LTE, will be a main feature of 3GPP Release 10, Scrase said. The specification is being submitted to the ITU as a candidate International Mobile Telecom-Advanced system, he said. A final submission to ITU will be competed by Nov. 1, and the completion of specifications for LTE-Advanced, supporting bandwidth of up to 100 MHz, is expected in 2011, he said. 3GPP is working on a smooth transition from 3G to 4G in the next few months, he said.

The speed, latency and efficiency of LTE indicate that the 4G technology could improve communication for public safety users like police, medical and rescue workers in cellular networks, Scrase said. He cited LTE as a potential solution for several emergency systems, including the Earthquake and Tsunami Warning System, Public Warning System, eCall, a project of the European Commission, and In Case of Emergency, first conceived in the U.K. and starting to expand into North America. 3GPP has an active program on public alerting and warning systems, automated notification of traffic accidents and storage of personal information to assist first responders in case of emergency, he said.

Scrase urged the standardization community to look at the impact of technology evolution on society. 3GPP is also taking environmental issues very seriously, in both the preparation of the standards and the impact of the deployment, he said. He said reducing the carbon footprint and improving energy efficiency are key requirements for 3GPP members.

Meanwhile, the growth of wireless broadband has changed carriers' business model, collapsing boundaries among telco, IP service providers and device makers, said Chris Ebert, Nokia Siemens Networks' head of 4G Market Development in North America. For carriers, the key is to connect and monetize a wide range of partners, particularly Internet companies, he said. Carrier revenue has been affected by the number of devices connected to the Web, he said.

It's very likely that femtocells will be part of initial LTE deployment, but uncertainty remains, Scrase and Ebert said. Scrase noted significant interest from carriers in deploying LTE femtocell. The first femtocell standard was included in 3GPP's Release 8. Work is being done to further incorporate femtocell technology in the 3GPP's release 9 standard, which will address LTE femtocells and support more advanced functionality for 3G femtocells. -- *Yu-Ting Wang*