

# Recent Activity in Standards and Regulations

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## FCC Approves Satellite Radio Service Merger ...with Conditions

On July 25, 2008, the FCC voted to approve the application of Sirius Satellite Radio Inc. and XM Satellite Radio Holdings Inc. to transfer control of their licenses and authorizations for the provision of satellite digital audio radio service (SDARS) in the United States. The Commission found that grant of the application, with the voluntary commitments made by the applicants and other conditions, is in the public interest.

After reviewing the empirical data available as part of its competitive analysis, the Commission determined there was insufficient evidence in the record to predict the likelihood of anticompetitive harms. It therefore evaluated the application under “worst-case” assumptions, i.e., that the relevant market is limited to SDARS. With voluntary commitments and other conditions to mitigate harm to consumers, the Commission found the transaction to be in the public interest. All of the voluntary commitments must continue in effect at least three years after consummation of the merger. The voluntary commitments and conditions include:

- A price cap for 36 months after consummation of the transaction.
- Within three months, offer to consumers the ability to receive a number of new programming packages, and to select programming on an a la carte basis.
- After nine months, offer interoperable receivers in the retail market.
- Exclusive manufacturing agreements are not allowed; provide the intellectual property to allow any manufacturer to develop SDARS equipment.
- Provide Sirius satellite service to Puerto Rico via terrestrial repeaters within three months.

## FCC Releases Report on Digital Television Transition Progress

A report on the status of the digital build out by full power television broadcasters by the FCC’s Media Bureau shows that over 96 percent of active full power television stations are either fully operational with digital service or are on track to have their full digital service operational by February 17, 2009.

1,002 stations (56 percent of television stations) reported that they have fully constructed their post-transi-

sition DTV facilities and are ready for the DTV transition. 41 percent of stations (736) have not yet completed construction but report making appropriate progress and expect to be operating their full digital service before February 18.

Approximately three percent (56 stations) will take advantage of the flexibility offered by the Commission and will be serving at least 85 percent of their service population on February 17, 2009, with final digital operations beginning sometime thereafter. This flexibility is available for stations needing additional time due to “unique technical challenges,” such as top mount/side mount, weather-related issues, or coordination with other stations.

One station forecasts that it will not be able to complete construction of its full digital facility until a few days after February 17, 2009, and will be dark for this brief time. As of late August, three stations have not submitted Form 387 status reports but have unofficially reported that they intend to be ready for the transition.

The Media Bureau’s report provides a snapshot of broadcasters’ overall readiness six months before the transition deadline, which is February 17, 2009. Full power stations must terminate analog broadcasting no later than 11:59:59 pm on February 17, 2009, and broadcast only digital signals as of February 18, 2009.

## FCC Seeks Comment on 1.9-2.1 GHz Wireless

On June 20, 2008, the FCC released a Further Notice of Proposed Rulemaking, which proposes public access to free, nationwide, high-speed wireless broadband Internet services using a portion of the winning bidder’s network in the 2.1 GHz Advanced Wireless Services (AWS) spectrum. The action builds on the FCC’s efforts to promote the deployment and ubiquitous availability of affordable broadband services for consumers.

The Further Notice specifically seeks comment on proposed rules for the AWS spectrum in the 1915-1920 MHz, 1995-2000 MHz, and 2155-2180 MHz bands. In 2004, the FCC sought comment on service rules for the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz, and 2175-2180 MHz bands (“AWS-2”), and in 2007, the FCC sought comment on service rules for the 2155-2175 MHz band (“AWS-3”). To supplement the comments received in response to these earlier notices, the FCC now requests comments on specific service rules for these bands.

Regarding the 2155-2180 MHz band, the notice proposes combining the 2155-2175 MHz band with the 2175-2180 MHz band to create a 25 MHz block of spectrum and a single nationwide license for the 2155-2180 MHz band. This larger block size may allow the AWS-3 licensee to make more robust use of the spectrum while operating at a stricter out-of-band emission limit. Alternatively, another proposed option would be to retain the 2155-2175 MHz AWS-3 block and allow the licensee to operate with a more traditional out-of-band emission limit.

The Further Notice also proposes requiring the licensee for the 2155-2180 MHz spectrum to provide—using up to 25 percent of its wireless network capacity—free, two-way broadband Internet service at engineered data rates of at least 768 kbps downstream. Additional obligations associated with the licensee's free broadband service would include providing a network-based filtering mechanism for the free Internet service in order to protect children and families, and a requirement that the network allow for the use of open devices.

The build-out requirements for the licensee would be to provide signal coverage and offer service to at least 50 percent of the total U.S. population within four years and to at least 95 percent of the U.S. population by the end of the 10-year license term. The notice also proposes permitting both downlink and uplink transmissions throughout the entire 2155-2180 MHz band.

### **Lithium Battery Experts Needed for Development of New IEEE Standard**

Developers working on lithium batteries and related applications are invited to participate in the development of a proposed new IEEE standard. The standard will provide a format for the characterization of lithium battery technologies in terms of performance, service life and safety attributes.

When completed, the standard will provide a framework for developers to describe their energy storage products. The resulting information will assist users in evaluating the possible application of emerging energy storage technologies. In the stationary battery industry, the IEEE standards are widely used by both users and manufacturers. The recommended practice will address lithium batteries utilizing secondary (rechargeable) electrochemistries, including lithium-ion, lithium-ion polymer, lithium-metal polymer and lithium-sulfur batteries. Primary (non-rechargeable) lithium batteries are beyond the scope of this document.

For more information, or to get involved in the IEEE Emerging Battery Technology Working Group, contact Mike Nispel, chair of the lithium battery working group, at [mnispel@verizon.net](mailto:mnispel@verizon.net) or +1-610-937-4411.

### **EU Formalizes Continued Development of Galileo Satellite Navigation Program**

On July 9, the European Parliament established legal documentation on the further implementation of the European satellite navigation programs—EGNOS and Galileo. Galileo is the core satellite system (similar to the U.S. Global Positioning System), while EGNOS is an adjunct service for infrastructure monitoring and correcting signals emitted by existing global satellite navigation systems. It consists of earth stations and several transponders installed on geostationary satellites. EGNOS also provides the means for promoting wide usage and developing special enhanced applications for commercial and public safety use.

Under the new regulation, the Galileo program will enter a development and validation phase, comprising the construction and launch of the first satellites, the establishment of the first ground-based infrastructures and all the work and operations necessary to validate the system in orbit. The aim is that this phase shall end in 2010, followed by a deployment phase consisting of the establishment of all the space and ground-based infrastructures as well as related operations. The aim is that this phase shall run from 2008 to 2013.

The action also establishes financing and procedural responsibilities for EU member nations.

*The information presented in this report was obtained from press releases issued by the pertinent organizations—FCC, IEEE and the EU.*