# What Takes the FCC So Long?

By Mitchell Lazarus

***Editor's Note: As he did last year at this time, Mitch offers to field brief inquiries on FCC matters from WD&D readers free of charge until mid-February***

The FCC's technical rules usually lag at least two or three years behind current technology. This has consequences: If a new product fails to comply with the old rules, it cannot lawfully be marketed in the United States. The more innovative the product, the more likely it is to miss complying. And getting the rules changed to accommodate a new technology can be frustratingly slow.

Some degree of regulatory obsolescence is inevitable. Each section of the rules is written at a particular moment in technological history. Unavoidably, it reflects the thinking of the times. But good engineers, almost by definition, are people who transcend the thinking of their times. It takes new, creative ideas to overcome the inadequacies of current products. Ironically, though, the very originality of a new product raises the greatest threat to compliance. That in turn delays sale of the new, superior product, and forces customers to get by with what the rules allow.

Recent history offers many examples. The proponents of wideband frequency hopping were unable to market their technology until the FCC completed a rule change earlier this year. Neither ultra-wideband nor software-defined radios are permitted, despite the advantages claimed by their proponents. The FCC staff recently rejected a higher-speed form of spread spectrum for non-compliance, saying a rule change would be needed to authorize it. (The manufacturer has asked for a second look.)

On the other hand, in some cases a product can be marketed notwithstanding an apparent conflict with the rules. Sometimes the Report and Order that establishes a rule specifies exceptions to it. For example, a rule that governs certain land mobile transmitters requires a minimum bits/second/Hertz spectrum efficiency. But outside the rules, buried in the Report and Order, is an exception for radios that use the spectrum efficiently in some other way, such as by deploying very densely.

Alternatively, the FCC will sometimes interpret a rule to permit the sale of equipment that does not obviously comply. Sometimes the FCC issues a waiver to authorize non-complying equipment, if the purpose of the rule is accomplished in some other way. Nonetheless, these forms of relief are all comparatively rare. If the new product differs sharply from its predecessors, a rule change may be the only option.

**Rule Changes Are Slow**

There is no problem in principle with changing the rules to make room for a new technology. Problems arise only because those changes take so long. Here is the typical sequence of events:

&#149 The manufacturer of a new technology prepares and files a Petition for Rule Making.

&#149 After a month or two, the FCC publicly announces the Petition, and invites comments and reply comments to be filed over a two-month period.

&#149 FCC staff at the Office of Engineering and Technology (OET) study the

comments and prepare a draft Notice of Proposed Rule Making (NPRM), which suggests specific rules. The five commissioners, helped by their staff advisors, review, edit, and approve the NPRM. This step takes at least six months, sometimes a year.
&#149 The NPRM is published in the Federal Register. It again requests comments and reply comments, this time over a two to four month period.
&#149 OET staff study this second round of comments, and draft a Report and Order that adopts new rules. Lobbying occurs. The commissioners and their staffs review and edit the draft. More lobbying. This step takes at least six months to a year, and often longer.
&#149 The FCC formally issues the Report and Order, and sends it to the Federal Register. The new rules take effect two to four months later.
Variations are possible. Sometimes the FCC skips comment on the Petition for Rule Making, or interposes a Notice of Inquiry before the NPRM. Often one or more parties seek formal reconsideration of the final rules. At best, though, the whole sequence typically requires two to three years &#151 longer than the expected market lifetimes of some products.
Lobbying worsens the delays. In decades past, the parties relied mostly on their written comments, but today both supporters and opponents of a proposed rule each meet with the OET and the commissioners' staffs, often several times. In some proceedings, the written comments are just a preliminary step to the real work, which takes place in the FCC conference rooms. Each party communicates its views and ideas to the staff, which relay them to other parties and receive their responses in subsequent meetings. Each presentation to the FCC requires a written filing that sets out the views expressed, and these too invite responses. Sometimes this can yield a series of proposals and counter-proposals for compromise, but the process is slow at best, and full agreement is rare. Most often the FCC still must decide in the end among opposing views, with the losers fighting every step of the way.
The length of time this takes is not the FCC's doing. A 1946 statute called the Administrative Procedure Act (APA) requires certain steps for changing federal regulations. Enacted in the days of manual typewriters and carbon paper, the APA relies primarily on the leisurely exchange and examination of written documents. A typical FCC technical rulemaking produces hundreds of documents running to many thousands of pages &#151 comments and reply comments, additional data and proposals, and required reports of meetings with FCC staff. The ultra-wideband proceeding, for example, has already amassed close to 500 documents, and is nowhere near a decision. Reading and analyzing all that paper takes time. Meanwhile, innovative products sit on the shelf.

**to Speed Up Rule Changes**

The APA requires that interested persons be allowed to participate through &quotsubmission of written data, views, or arguments.&quot The 1946 authors probably equated &quotwritten&quot with &quoton paper,&quot but the statute does not actually say that. And indeed, the FCC permits Internet-filed submissions, and also posts all incoming submissions on its web site. Basically, though, this practice just emulates an old-fashioned paper proceeding using PDF files. The PDF files are easier to locate and transmit, but they do nothing to ease the decision-makers' job. Worse, Internet access tends to attract large numbers of duplicative and/or uninformed filings, which clog the system without increasing the quality of the debate. In all, current use of the Internet probably takes only a few days off a

multi-year proceeding.
Many frustrated lawyers and clients, waiting month after month for needed rules, have reached similar ideas on how the FCC might use the Internet to better advantage. One much-discussed option is a web-based discussion page for each proceeding. In place of filing an inches-thick paper comment addressing a dozen issues, parties would be asked to post multiple short filings, each dealing with a single issue. Responding parties would do the same, generating a distinct thread for each issue or sub-issue. This would enable the parties to answer each other's arguments and proposals directly, instead of through the FCC staff, and so should greatly help to speed agreement (or impasse, as the case may be). To facilitate the process, the FCC can moderate and sort the submissions, post its own requests for clarification or data, and perhaps offer proposals for compromise.
Of course, the rules arrived at by compromise may differ from those originally set out in the NPRM. This can raise legal issues. If the compromise rules are a "logical outgrowth" of those in the NPRM, they can be adopted without violating the APA. But if the compromise proposal departs far enough that the NPRM did not give reasonable notice of the outcome, then the FCC must issue a Further Notice of Proposed Rule Making, and receive public comment, before it can proceed.
With these refinements, an Internet-based proceeding should satisfy the APA legal requirements. By narrowing the issues at each stage, it will help to streamline the FCC's decision-making, and result in a leaner, better focused NPRM and Report and Order. Best of all, it should speed the market availability of new technologies, to the benefit of manufacturer and customer alike.
**Mitchell Lazarus is a lawyer with the firm of Fletcher Heald & Hildreth PLC, with 18 years' experience representing clients on technical issues at the FCC. He can be reached at 703-812-0440 or Mlazarus@alum.MIT.edu**

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