

Appendix E:

Negotiated Rulemaking: An Alternative to Traditional Rulemaking

■ Background

For several years, the FCC has been searching for a better way to develop new service rules and license new service providers. This search is, in part, the result of the rash of litigation that often surrounds FCC decisions, and the FCC's desire to avoid lengthy court battles in order to speed the introduction of (new) services to the public. Several options have been discussed and tried including lotteries, spectrum auctioning, a consortium, and now negotiated rulemaking. This is the first time such an approach has been tried by the FCC, and observers and proponents of other new services are watching the process closely. If the process succeeds for little LEOS, the FCC expects to use it as a model in other proceedings—with potentially widespread effects on the traditional approach to rulemaking at the FCC.¹

In order to speed the development of the rules and regulations governing the new little LEOS systems, the FCC established an Advisory Committee under the Federal Advisory Committee Act (FACA)² and the Negotiated Rulemaking Act³ to assist in the development of the technical and service rules and regulations

that will govern the provision of mobile (and fixed) services provided by LEOS systems operating in frequencies below 1 GHz. Pursuant to the requirements of the FACA, the FCC issued a public notice of its intention to form an advisory committee on little LEOS in April 1992.⁴ Numerous parties responded to the notice, including Orbcomm, Starsys, Volunteers in Technical Assistance (VITA), who submitted jointly-filed comments that outlined their proposals for technical and service rules.⁵ These comments were intended to form the basis for the FCC Notice of Proposed Rulemaking (NPRM) on little LEOS service rules, thereby eliminating the need for the Advisory Committee altogether. The FCC did not accept this approach, and proceeded to form the Advisory Committee. It met for the first time on August 10, 1992, at which time the charter of the group and a work plan were discussed.

■ Participants

In addition to the companies that have filed applications to provide little LEOS services—VITA, Starsys, Orbcomm, and Leosat⁶—representatives from several

¹ The FCC, in fact, has begun a negotiated rulemaking for LEOS systems operating above 1 GHz. Federal Communications Commission, "MSS Above 1 GHz Negotiated Rulemaking Committee," Public Notice, DA 92-1691, released Dec. 15, 1992.

² 5 USC App. 2 (Dec. 21, 1982).

³ Negotiated Rulemaking Act of 1990 (NRA), Public Law 101-648, Nov. 28, 1990.

⁴ Federal Communications Commission "FCC Asks for Comments Regarding the Establishment of an Advisory Committee to Negotiate Proposed Regulations," Public Notice, DA 92-443, released Apr. 16, 1992.

⁵ See Jointly Filed Comments of ORBCOMM, STARSYS, and VITA, "In the Matter of Establishment of an Advisory Committee to Negotiate Proposed Regulations for Low-Earth Orbit Satellite Services Operating Below 1 GHz," CC Docket No. 92-76, May 18, 1992, and Jointly Filed Supplemental Comments of Orbcomm, Starsys, and VITA in above proceeding, Aug 7, 1992.

⁶ Leosat's application was dismissed by the FCC on procedural grounds, Leosat filed for a reconsideration of this dismissal, but that appeal was denied. It was allowed to sit on the Advisory Committee despite objections by Orbcomm.

government agencies and the aeronautical community participated in the work of the committee.⁷ Government representatives were primarily interested in ensuring that their existing use of the frequencies in and adjacent to the bands to be used by little LEOS would be adequately protected. The Air Force, for example, is planning an addition to its meteorological satellite system that could be subject to interference from the new LEOS systems.

■ Charter and Work Program

The official charter of the Advisory Committee states that the task of the Committee was to “gather and discuss information necessary to form recommendations to the FCC for the regulation, licensing and coordination of little LEO satellite services. This information will be used by the FCC in conjunction with its separate proceeding on the frequency allocations for little LEOS⁸, and will form the basis for an NPRM that will outline technical and service rules for new little LEOS services. In order to accomplish this work in a timely manner, an informal working group was formed to look at the specific issues outlined in the work plan for the committee. An editorial working group was formed to develop the language for the Committee’s final report to the FCC.

The FCC’s general goal, as outlined in the work program for the committee, was to find ways to facilitate sharing—not only among the three proposed systems, but also between them and existing (terrestrial and space) systems using the proposed (and adjacent) frequencies, between U.S. and international users of the frequencies, and between present and future users of the bands, including future additional LEOS systems.

In the course of its deliberations, the committee addressed the following issues, among others:

- How to license multiple operators;
- The impacts of the footnotes adopted at WARC-92 on little LEOS services;
- Sharing considerations, as noted above;
- Which modulation (code division multiple access, time division multiple access, or frequency division multiple access) method should be employed;
- The need for separate rules for nonprofit providers such as VITA;
- Coordination mechanisms with other services, including services sharing the same bands and services using adjacent bands that could be subject to interference from little LEOS operations.

The committee finished its work as scheduled and submitted its final report to the FCC on September 18, 1992.

DISCUSSION

The work of the committee was contentious for several reasons. First, the frequencies in question are to be used by both the Federal Government and the private sector, and some of these frequencies were being opened up for the first time to the private sector. In the United States, the 148-149.9 MHz band, for example, was previously reserved for military fixed and mobile communications.

Second, the international ramifications of the decisions made in the committee and the FCC were significant. The United States will be the first country to operate commercial LEOS systems in these bands, and other countries are apprehensive that what is decided in the United States will become the &facto

⁷The full membership of the committee consisted of: ARINC, Inc., Department of the Air Force, Department of the Army, Department of the Navy, Federal Aviation Administration, National Aeronautics and Space Administration, National Oceanic and Atmospheric Administration, Orbcomm, Starsys, and VITA. The FCC supplied the facilitator and the designated Federal representative for the group.

⁸Federal Communications Commission, “Charter for the Below 1 GHz LEO Negotiated Rulemaking Committee,” Document LEOAC-13, Aug. 10, 1992, p. 1.

⁹Federal Communications Commission, “Amendment of Section 2.106 of the Commission’s Rules to Allocate Spectrum to the Fixed-Satellite Service and the Mobile-Satellite Service for Low-Earth Orbit Satellites,” ET Docket No. 91-280, FCC 91-305, released Oct. 18, 1991.

rules for little LEOS operation all over the world.¹⁰ The FCC was keenly aware of these concerns.

Third, the timeline for the process was ambitious. The FCC wanted to move the process along quickly in order to let the prospective companies get their services up and running as soon as possible--a strategy that would allow U.S. companies to bring their services into operation ahead of any foreign competition.¹¹ This short timeline was also instituted so that a negotiated rulemaking on big LEOS could begin as soon as possible--conducting two negotiated rulemakings simultaneously was not possible due to limitations on FCC staff time. As a result, the committee was given only 37 days to do its work. Meetings were held every week, supplemented by work conducted in the informal working group and the editorial group.

Finally, in an attempt to speed the process,¹² and some have argued, circumvent potential dissent, the three main little LEOS system proponents met informally and devised a set of rules and sharing arrangements that they submitted to the FCC with the hope of having them adopted by the FCC.¹³ The FCC chose not to adopt them whole, but to include them as inputs to the work of the Advisory Committee. Leosat, a little LEOS proponent whose application was dismissed by the FCC, was not part of those informal meetings and accused the others of trying to stifle competition.

■ Results

The final report represented, as much as possible, a consensus of views reached in the course of the

month-long deliberations of the committee and its informal working groups. However, disagreements on several matters were not resolved. To accommodate additional views on these matters, the report includes separate statements from several of the participants. The committee submitted its final report to the chief of the FCC's Common Carrier Bureau for consideration in the FCC preparation of its formal NPRM on little LEOS service rules. The NPRM was adopted in January 1993.

One issue that remains unclear is how future LEOS systems will be accommodated. The FCC has maintained a commitment to promoting competition in little LEOS services, and has said that it would like to see at least three competitors and maybe more offering such services. A crucial question not determined in the negotiated rulemaking process was how many entrants can be accommodated. The private sector participants in the process, of course, would like to limit entry by potential future competitors and have said that trying to accommodate unspecified future needs would be impossible.

Another unresolved issue, and the subject of heated debate during the course of the committee's work centered on the question of which modulation scheme is best suited for little LEOS applications. Orbcomm and VITA have indicated that they will use a frequency division multiple access system, while Starsys and Leosat have proposed code division multiple access systems.

¹⁰ See, for example, the comments of Michel Carpentier, Director General (telecommunications) for the European Community Commission: "It is a matter of some importance to the commission to ensure that the initial LEO systems are introduced in such a manner as not to prejudice competition, and in particular, to ensure that future systems can operate within the constraints of the existing allocation." Quoted in "U.S. Accepts EC Commission Request for Informal Talks. . ." *Telecommunications Reports*, July 27, 1992, p. 15.

¹¹ Smolsat, a Russian LEOS system, is already partly operational.

¹² Speeding up the process helps the LEOS providers in at least two ways. First, the delay costs them money. The quicker these systems can be licensed and begin operations, the faster they can begin making money and producing revenue. In the meantime, all the companies still have costs (salaries) that must be paid. Second, a quicker start keeps actual and potential investors interested--the longer to returns on investment, the less these systems are likely to attract new investors and the more discontented existing investors become. They are less likely to keep putting money in for salaries when the potential returns keep slipping in time. This is an important consideration in an era where private capital for expensive and somewhat risky ventures is tight.

¹³ See Jointly Filed Comments of Orbcomm, Starsys, and VITA, "In the Matter of Establishment of an Advisory Committee to Negotiate Proposed Regulations for Low-Earth Orbit Satellite Services Operating Below 1 GHz," op. cit., footnote 5, and Jointly Filed Supplemental Comments of Orbcomm, Starsys, and VITA in same proceeding, Aug. 7, 1992.