



NEWS

Federal Communications Commission
445 12th Street, S.W.
Washington, D. C. 20554

News Media Information 202 / 418-0500
Internet: <http://www.fcc.gov>
TTY: 1-888-835-5322

This is an unofficial announcement of Commission action. Release of the full text of a Commission order constitutes official action.
See MCI v. FCC, 515 F 2d 385 (D.C. Circ 1974).

FOR IMMEDIATE RELEASE:
March 20, 2009

NEWS MEDIA CONTACT:
Bruce Romano: 202-418-2124

FCC PROPOSES NEW RULES FOR IMPLANTED NEUROMUSCULAR MICROSTIMULATORS (ET Docket No. 09-36)

Washington, D.C. – The Federal Communications Commission (FCC) today proposed to allocate spectrum and adopt service and technical rules for the utilization of new implanted medical devices that would greatly expand the use of functional electric stimulation to restore sensation, mobility and function to paralyzed limbs and organs. These implanted neuromuscular microstimulators would function as wireless broadband medical micro-power networks (MMNs) within a patient. By eliminating the wires now used to interconnect multiple implanted neuromuscular microstimulators and the external power source for the implants, MMNs would greatly reduce the risk of infection and increase patient mobility and system reliability.

Several commenters assert that this technology could revolutionize medical treatment and therapy for millions of people living with brain and spinal cord injuries and neuromuscular disorders such as multiple sclerosis, polio, cerebral palsy, and ALS (amyotrophic lateral sclerosis, often referred to as "Lou Gehrig's Disease"), as well as numerous other neurological disorders. It could be used in conjunction with next-generation prosthetic limbs to provide wireless sensation and control to the prostheses. Of particular note, this technology can provide an important tool in the medical treatment and care of numerous U.S. soldiers who suffered spinal cord, brain, and other serious injuries in Iraq, Afghanistan, and other missions abroad.

The Notice seeks comment on the feasibility of allowing up to 20 megahertz of spectrum in the 413-457 MHz band to be used under the Medical Device Radiocommunication Service (MedRadio Service) in Part 95 of the Commission's rules, and seeks comment on the allocation of four specific segments for this purpose: 413-419 MHz, 426-432 MHz, 438-444 MHz, and 451-457 MHz. The Notice also seeks comment on the prospective service and technical rules that would govern MMN operations, such as transmitter power, emission bandwidth, duty cycle, contention protocols, and other operating specifications which generally comport with the framework of the existing MedRadio Service. The Notice proposes to limit MMN operations to use only by persons for diagnostic and therapeutic purposes, and only to the extent provided under the direction of authorized health care professionals.

Action by the Commission, March 17, 2009 by Notice of Proposed Rule Making (FCC 09-20). Acting Chairman Copps, Commissioners Adelstein and McDowell. Separate statements issued by Acting Chairman Copps, Commissioners Adelstein and McDowell.

For additional information, contact Gary Thayer at (202) 418-2290 or gary.thayer@fcc.gov.

ET Docket No. 09-36.

– FCC –

News and other information about the FCC is available at www.fcc.gov

**STATEMENT OF
ACTING CHAIRMAN MICHAEL J. COPPS**

Re: Amendment of Parts 2 and 95 of the Commission's Rules to Provide Additional Spectrum for the Medical Device Radiocommunication Service in the 413-457 MHz band, ET Docket No. 09-36

I am pleased to support this Notice of Proposed Rulemaking, which examines the possible allocation of additional spectrum and service rules for use by advanced wireless devices that could significantly enhance the quality of life of many Americans that suffer from a wide array of neuromuscular disorders. In particular, this proceeding explores whether 24 megahertz of spectrum in the 400 MHz band could accommodate wideband medical micropower network devices that could serve as artificial nervous systems to restore sensation, mobility, and function to paralyzed limbs and organs. Among the many Americans that could benefit are men and women who, in providing service and sacrifice to this nation, are experiencing combat-related brain and spinal cord injuries.

I would like to give thanks to our Office of Engineering and Technology and the National Telecommunications and Information Administration (NTIA) for working closely together in crafting this important Notice.

**STATEMENT OF
COMMISSIONER JONATHAN S. ADELSTEIN**

RE: *Amendment of Parts 2 and 95 of the Commission's Rules to Provide Additional Spectrum for the Medical Device Radiocommunication Service in the 413-457 MHz band, ET Docket No. 09-36*

I am pleased to approve this Notice of Proposed Rulemaking because the medical technologies benefiting from this item will have a deep impact on the health and lives of Americans. It represents new hope for those who suffer from neuromuscular disorders as it brings us a step closer to an artificial nervous system that can help restore sensation and function to paralyzed limbs and organs. Coupled with the establishment of the new Medical Radio Communication Service, the Commission is taking great strides in adopting wireless policies that facilitate health care.

This notice is the result of the combined efforts of the Alfred Mann Foundation, the National Telecommunications and Information Administration and our own Office of Engineering and Technology, and I commend them on their good work.

**STATEMENT OF
COMMISSIONER ROBERT M. McDOWELL**

RE: *Amendment of Parts 2 and 95 of the Commission's Rules to Provide Additional Spectrum for the Medical Device Radiocommunication Service in the 413-457 MHz Band, ET Docket No. 09-36*

I am delighted to finally be able to vote to approve this notice of proposed rulemaking, which was originally filed with the Commission in September 2007. Acting Chairman Copps deserves praise for bringing this exciting proposal forward and giving it the attention it deserves. Our action today takes another step to improve the quality of life for millions of Americans with impaired mobility and paralysis.

In addition, I thank the Alfred Mann Foundation (AMF) not only for its groundbreaking work, but for its perseverance in navigating the regulatory approval process. I wish AMF the best of luck as the Commission moves forward to more closely analyze its important proposal.

Finally, I want to note my appreciation for Acting Chairman Copps' pledge to promptly move forward on a similarly interesting proposal submitted by GE Medical Systems. I am committed to doing my part to ensure that we complete our work in these two proceedings expeditiously. Our fellow Americans living with chronic health conditions deserve no less.