



PUBLIC NOTICE

FEDERAL COMMUNICATIONS COMMISSION
445 TWELFTH STREET, S.W.; TW-A325
WASHINGTON, D.C. 20554

News Media Information: (202) 418-0500
Fax-On-Demand: (202) 418-2830
Internet: <http://www.fcc.gov>
<ftp.fcc.gov>

DA 00-1504

Released: July 6, 2000

FCC'S OFFICE OF ENGINEERING AND TECHNOLOGY TO HOST FORUM ON 90 GHz TECHNOLOGIES

On May 31, 2000 the Commission released a Public Notice (DA 00-1191) announcing a forum on "New Horizons: 90 GHz Technologies" in the Commission Meeting Room at 445 12th Street, SW, Washington DC from 9 AM until 12:30 PM on July 14, 2000. This notice supplements the first one with details about the speakers.

At present, 77 GHz is the highest electromagnetic radiofrequency for which service rules exist that permit the development and sale of commercial products. The forum will explore possible commercial uses for the 92-95 GHz, a band presently allocated for both government and nongovernment use but lacking service rules.

The potential transmission range in the 92-95 GHz band more closely resembles that of the 40 GHz band rather than the very short transmission range of the 59-64 GHz band.¹ The wavelength at 90 GHz permits the design of narrow beam antennas that are very small. While components for 90 GHz are not in regular production, the Defense Advanced Research Projects Agency's MIMIC and MAFET Programs developed monolithic microwave integrated circuit technology for this band in anticipation of both military and commercial use. Thus there may be an opportunity for the development of new and innovative communications systems in this band.

Topics to be discussed include:

- 1) Technologies available for the 92-95 GHz band;
- 2) Possible system applications for this band;
- 3) Alternative frameworks for services rules (licensed, unlicensed, band manager, etc.);
- 4) Technical rules including issues of protecting adjacent passive allocation at 86-92 GHz;
- 5) Approaches the FCC might take to stimulate technical innovation in this band; and

¹ See OET Bulletin No. 70 (July 1997) Millimeter Wave Propagation: Spectrum Management Implications, available by internet at http://www.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins/oet70/oet70a.pdf

6) Whether, and the extent to which, sharing all or part of the band with the Federal Government systems is practical.

The program for the forum is as follows:

Welcome

Dale Hatfield, Chief, Office of Engineering and Technology, FCC

Introduction: Why 90 GHz?

Michael Marcus, Associate Chief for Technology, Office of Engineering and Technology, FCC

How Radio Propagation Issues Make 90 GHz Interesting

Vilhelm Gregers-Hansen, Naval Research Laboratory, Washington, DC

Millimeterwave Semiconductor Issues

Edgar Martinez

Defense Advanced Research Projects Agency, Arlington, VA

90 GHz Government Sharing Issues

Russell Slye

National Telecommunications and Information Administration, Washington, DC

TRW's 90 GHz Device Technology and Applications

Dwight Streit

TRW Space & Electronics Group, Los Angeles, CA

Sanders' 90 GHz Device Technology and Applications

Anthony Immorlica

Sanders – A Lockheed-Martin Company, Nashua, NH

UMS' 90 GHz Device Technology and Applications

Holger Meinel

United Monolithic Semiconductors, Orsay, France

90 GHz Uplink/Downlink Technology

Harold Rosen

Volacom, Los Angeles CA

90 GHz Technology in Russia and China

Harry Rutstein

Dorado International Corporation, Seattle, WA

For further information contact Dr. Michael Marcus, Associate Chief for Technology, OET, at 202-418-2418, Fax 202-418-1944, TTY 202-418-2989, e-mail: mmarcus@fcc.gov

Audio and video tapes of the forum may be purchased from Infocus, 341 Victory Drive, Herndon, VA 20170, by calling Infocus at (703) 834-0100 or by faxing Infocus at (703) 834-0111.