

Secretary of the FCC
445 12th Street, SW
Washington, DC 20554

Subject: RM-9740

Dear Sir,

I am writing to you to provide comments on the proposed rule-making, RM-9740. This proceeding deals with unwanted emissions from satellites and, if modified carelessly, could significantly damage the ability of radio astronomers and earth scientists to successfully produce useful scientific results.

As you know, unwanted emissions (spurious emissions, harmonics, intermod products) from satellites now pose the greatest threat to radio astronomy and passive remote sensing.

Radio observations represent a unique window on the universe, providing scientific data unavailable from telescopes operating at visible-light wavelengths or other parts of the electromagnetic spectrum. Of the ten astronomers who have won the Nobel Prize in Physics, six of them used radio telescopes for their work. The future advancement of astronomy and of physics is dependent upon the preservation of the radio spectrum for observation of the universe with radio telescopes. Relaxing regulations on spurious emissions from satellites will potentially harm these observations.

The Radio Communication Sector of the International Telecommunications Union has provided excellent guidelines for regulating emissions in radio astronomy bands. Specifically, in bands allocated to radio astronomy, the aggregate unwanted emissions from satellite (or any other) transmitters should not exceed the detrimental interference levels listed in Recommendation ITU-R RA.769. The FCC has a responsibility to keep our radio skies clear. The proposed changes are inconsistent with this. I strongly urge you to follow the ITU guidelines.

A.J. Beasley