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COURSE ON BASIC TELECOMMUNICATIONS SCIENCE

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Interference between Satellite Networks

CCIR, Geneva, Switzerland

Appendix 29

Interference between satellite networks *)

Description

This program implements on the microcomputer the procedures given in Appendix 29 to the Radio Regulations for determining the requirement for both national and international coordination of geostationary-satellite networks sharing the same frequency bands. It calculates the percentage increase in noise temperature caused by an interfering system.

Mode of operation

Interactive with most known microcomputers that use the MS-DOS operating system.

Input requirements

Depending on the Appendix 29 case type and user choice of program options for approximation of off-axis gains, inputs include satellite and earth station coordinates, antenna gains, and transmitter power densities, as well as the system noise temperature of the victim link and the frequencies involved. Input data may be stored for subsequent recall.

Data output

Percentage change in equivalent noise temperature. In addition, depending on the case type and options selected, intermediate results are provided, such as the actual increase in equivalent noise temperature, transmission gains, off-axis angles and gains, topocentric and geocentric angular separations, path losses, polarization isolation factors, and the great-circle distance between the earth stations.

Output media

Terminal display. Hardcopy at user's option.

Point of contact

Department of Commerce
National Telecommunications and Information Administration
Chief, Computer Services Division
179 Admiral Cochrane Drive
Annapolis, MD 21401

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*) Source:

Documents
CCIR Study Groups

Doc. IWP 1/2-193
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