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For more information on Study Group 3 rsg3@itu.int



## ITU-R Study Group 3

**Radiowave Propagation** 





## ITU-R Study Group 3 focuses on radiowave propagation and radio noise

## **Global Scope**

ITU-R Study Group 3 produces Recommendations, Reports, Handbooks on radiowave propagation prediction methods and reference data sets and on the characteristics of radio noise, for the purpose of facilitating spectrum management, improving radiocommunication system design and operation and predicting reliability and compatibility.

- The four specialised Working Parties of ITU-R Study Group 3 address all aspects of radiowave propagation.
- The main topics covered by Study Group 3 are:
  - » Information and models for the fundamental principles of radiowave propagation, the relevant statistical laws and the means of expressing temporal and spatial variability. The basic mechanisms of propagation in free-space and non-ionized media together with tables of propagation data and associated climatic data.

- » prediction methods for terrestrial point-toarea propagation paths, in the main associated with terrestrial broadcasting and mobile services, short-range indoor and outdoor communication systems and with point-tomultipoint wireless access systems.
- » all aspects of radiowave propagation and prediction models both via the ionosphere at lower frequencies and for trans-ionospheric paths. Ground wave applications at lower frequencies and data on radio noise at all frequencies.
- » radiowave propagation for point-to-point terrestrial paths and Earth-space paths. For terrestrial paths, prediction methods for both line-of-sight and over-the-horizon links, taking into account of fading and distortion of the wanted signal. Propagation prediction for unwanted signals to evaluate interference between different systems.

## **Connect With Your Peers**

- Participants in ITU-R Study Group 3 meetings are diverse and include administrations, network operators, service providers, equipment manufacturers, international organizations, and academia.
- Study Group 3 is essential for developing and maintaining ITU-R Recommendations, Reports and Handbooks on radiowave propagation, which are used worldwide.
- Topics of discussion are driven by the contributions of participants, taking account of developments in technology and in radio applications and based on the priorities set by the Radiocommunication Assemblies and the World Radiocommunication Conferences.
- By joining Study Group 3, you will have the opportunity to affect the development of recommendations on radiowave propagation
- As a Member, you will also have the opportunity to network and collaborate with specialists representing government, universities, research institutes, and industry from around the world.