

Scientific Workshop

Title: Activities of ITU-R Study Group 3 on radiowave propagation

Abstract: ITU-R Study Groups develop technical bases for decisions taken at World Radiocommunication Conferences, and develop global standards (Recommendations), Reports and Handbooks on radiocommunications. ITU-R Study Group 3 (SG3) addresses propagation of radio waves in ionized and non-ionized media and the characteristics of radio noise, for the purpose of improving radiocommunication systems.

It is structured in Working Parties dealing with:

☒ Propagation fundamentals

☒ Point-to-area propagation

 Ionospheric propagation and radio noise

☒ Point-to-point and Earth-space propagation

The workshop will introduce ITU-R, SG3 and its working methods, present key SG3 Recommendations, describe key areas of future study, and give guidance on how to contribute to the work of SG3.

Workshop outlines:

Introduction to ITU, SG 3 and working methods (David Botha, Clare Allen)

WP 3J – Propagation Fundamentals – Key Recommendations and topics

WP 3K - Point-to-area propagation – Key Recommendations and topics

WP 3L – Ionospheric propagation and radio noise – Key Recommendations and topics

WP 3M - Point-to-point and Earth-space propagation – Key Recommendations and topics (Richard Rudd)

SG3 Software, experimental data and model testing – How to contribute (Antonio Martellucci)

Panel discussion – Future requirements (Moderator Carol Wilson)

Short CV of Speakers:

Clare Allen is a specialist in the area of radiowave propagation and interference modelling with over 20 years of experience in spectrum management at the UK communications regulator, Ofcom and is the Chair of ITU-R Study Group 3.

David Botha has been the ITU-R Counsellor for Study Group 3 since 2011.

Carol Wilson has over 30 years of experience in antenna design, propagation modelling and interference management. She is the Spectrum Manager for CSIRO Space and Astronomy, particularly interference management for Inyarrimanha Ilgari Bundara, the CSIRO Murchison Radio-astronomy Observatory. Carol was Chair of ITU-R SG 3 from 2015 to 2023.

Richard Rudd is a specialist in radiowave propagation studies with Plum Consulting and is Vice-Chair of ITU-R Working Party 3M.

Antonio Martelucci initiated his activity as a researcher on radiowave propagation at Fondazione Bordoni in 1993 and since 2001 he is at ESA/ESTEC as Radiowave Propagation Engineer. He contributed to ITU-R SG3 since 1993, coordinating work on propagation data and studies on clouds and precipitation after 2006.

The Chairs of WP 3J, 3K and 3L will enlist speakers to represent their groups.

