



भारत सरकार  
दूरसंचार विभाग  
दूरसंचार अभियांत्रिकी केंद्र  
Government of India  
Department of Telecommunications  
Telecommunication Engineering Centre  
K.L. Bhawan, Janpath, New Delhi- 110001  
(Radio Division)



No. 8-1103/2022-R/TEC /3

Dated: 04-04-2022

**Subject: Constitution of National Working Group (NWG)-5 of ITU-T for the current Study period of 2022-2024.**

Dear Sir/Madam,

NWG-5 corresponding to ITU-T Study Group-5(SG-5), works to develop the contribution documents pertaining to the focus areas of ITU-T SG-5 with respect to the Indian Telecommunication scenario. ITU-T SG-5 on 'Environment and Circular Economy' is responsible for studies on methodologies for evaluating effects of telecom technologies on climate change and publishing guidelines for using the telecom technologies in an eco-friendly way.

2. Study period of 2016-2020 (extended till 2022) concluded with WTSA-20 held in March 2022. Post WTSA-20, NWG-5 on 'Environment and Circular Economy' for the current study period of 2022-24 is to be reconstituted. DDG(Radio),TEC is the designated chairperson of NWG-5.
3. It is therefore requested to kindly send the nominations from your organizations with contact details, who desire to participate and contribute in the activities of NWG-5. A Brief about ITU-T SG-5 is enclosed. The nominations may kindly be sent on email latest by 15<sup>th</sup> April, 2022 : bhoomika.gaur@gov.in and dirr1.tec-dot@gov.in.

*Ashish Tayal*  
(Ashish Tayal)  
Director R1

Encl: A/A.

To,

All stakeholders  
(Including Government/PSUs, OEMs, Academia,  
R&D Organizations, TSPs and Associations)

# Study Group 5 at a glance

## ITU-T Study Group 5 - Environment and circular economy

ITU-T Study Group 5 (SG5) is responsible for studies on methodologies for evaluating ICT effects on climate change and publishing guidelines for using ICTs in an eco-friendly way. Under its environmental mandate SG5 is also responsible for studying design methodologies to reduce ICTs and e-waste's adverse environmental effects, for example, through recycling of ICT facilities and equipment.

In addition to its climate-focused activities, the ITU-T Recommendations, Handbooks and other publications produced by SG5 have four main objectives. The first is to protect telecommunication equipment and installations against damage and malfunction due to electromagnetic disturbances, such as those from lightning. In this field, SG5 is one of the world's most experienced and respected standardization bodies.

The second is to ensure safety of personnel and users of networks against current and voltages used in telecommunication networks. The third is to avoid health risks from electromagnetic fields (EMFs) produced by telecommunication devices and installations. The fourth is to guarantee a good quality of service (QoS) for high speed data services by providing requirements on characteristics of copper cables and on the coexistence of services delivered by different providers.

### Work highlights

In recent years, one of SG5's best-known products has been an energy-efficient one-charger-fits-all mobile phone solution. Every mobile phone user will benefit from the new Universal Charging Solution (UCS), which enables the same charger to be used for all future handsets, regardless of make and model.

SG5 has, in addition, developed a UCS for stationary ICT devices (such as modems, set-top boxes, home networking equipment and fixed telephones) which will further reduce the number of chargers manufactured by widening the range of compatible devices, facilitating adapter reuse and recycling, and increasing build-quality and resilience to over-voltages.

SG5 work encompasses globally agreed methodologies for measuring the carbon footprint of ICTs, to facilitate measurement of the impact of ICTs on emissions and support meaningful reporting and comparisons. ITU's common methodology will help establish the business case to go green and support informed consumer choices and climate-friendly business procurement.

SG5 also studies technical frameworks for the responsible management of the ICT systems that underpin wireless communications, with resulting ITU-T Recommendations safeguarding populations' health and ensuring electromagnetic compatibility (EMC).

SG5-developed ITU-T Recommendations give operators, manufacturers and government agencies the tools required to assess EMF levels and to verify compliance with the World Health Organization (WHO) recommended human-exposure guidelines set out by the International Commission on Non-Ionizing Radiation Protection (ICNIRP) and the IEEE International Committee Electromagnetic Safety (ICES).

EMC is another key component of this work, ensuring that the functionality of telecommunication equipment is not compromised by electromagnetic interference related to EMFs and conducted disturbances emitted by other electrical or communications systems. EMC is becoming particularly relevant in accounting for the convergence of telecommunication and IT equipment, as well as in ensuring the efficient operation of home networks.