#### **STUDY GROUP 2**

### QUESTION 7/2

### Strategies and policies concerning human exposure to electromagnetic fields

### 1 Statement of the situation or problem

The deployment of different sources of electromagnetic fields (EMF) to cater for the telecommunication and information and communication technology (ICT) needs of urban and rural communities has developed very rapidly over the past years. This has been due to strong competition, ongoing cellular penetration and traffic growth, increased usage of data services, quality of service (QoS) requirements, network coverage and capacity extension, and the introduction of new technologies.

This development has prompted concern as to the possible effects of prolonged exposure to emissions on people's health.

This concern on the part of populations is growing, aggravated by the feeling that they are not being kept informed in regard to the process for deploying these installations in their vicinity. As a consequence of rapid technological development in the field of telecommunications, many complaints have been received by operators and government bodies responsible for radiocommunications/ICTs.

Thus, since the continued development of radiocommunications requires trust on the part of populations, the work carried out in study groups of the ITU Radiocommunication Sector (ITU-R), specifically under new Question 1/239, and in Study Group 5 of the ITU Telecommunication Standardization Sector (ITU-T) under Resolution 72 (Rev. Hammamet, 2016) of the World Telecommunication Standardization Assembly (WTSA), on measurement and assessment concerns related to human exposure to EMF, as well as Resolution 176 (Rev. Busan, 2014) of the Plenipotentiary Conference, on human exposure to and measurement of EMF, should be complemented by studies on the different regulatory and communication mechanisms developed by countries to make populations more knowledgeable, aware and informed and thus facilitate the deployment and operation of radiocommunication systems.

# 2 Question or issue for study

The following subjects should be studied:

- a) Compilation and analysis of the regulatory policies concerning human exposure to EMF that are being considered or implemented for authorizing the installation of radiocommunication sites.
- b) Description of the strategies or methods for raising populations' awareness and knowledge of, and providing them with more information on, the effects of EMF from radiocommunication systems.

- c) Proposed guidelines and best practices on this matter.
- d) Information on the international (mainly in WHO, ICNIRP and IEEE) activities, including updated limits of exposure levels.
- e) Challenges and opportunities of developing technical regulations on the limits for maximum exposure to non-ionizing electromagnetic radiation from radio base stations and specific absorption rate levels in wireless devices.

### 3 Expected output

A report to the membership presenting guidelines to assist Member States in resolving similar problems faced by regulatory bodies. The report will provide material for workshops and seminars to share experiences on the establishment of limits for maximum exposure to non-ionizing electromagnetic radiation from radio base stations.

### 4 Timing

A provisional report is to be presented to Study Group 2 in 2019. It is proposed that the study be completed in 2021, at which date a final report containing guidelines will be submitted.

# 5 Proposers/sponsors

ITU membership.

# 6 Sources of input

- Member States, Sector Members, Associates and Academia.
- Regional organizations
- ITU Sectors
- World Health Organization (WHO)
- International Commission on Non-Ionizing Radiation Protection (ICNIRP)
- Institute of Electrical and Electronics Engineers (IEEE)
- Telecommunication Development Bureau (BDT) focal points.

# 7 Target audience

#### a) Target audience – Who specifically will use the input?

Target audience	Developed countries	Developing countries <sup>1</sup>	
Telecom/ICT decision-makers, local authorities	Yes	Yes	
Telecom/ICT regulators	Yes	Yes Yes	
Service providers/operators	Yes		
Constructors/equipment provider	Yes	Yes	

#### b) Proposed methods for implementation of the results

The results of the Question are to be distributed through ITU-D reports, or as agreed during the study period in order to address the Question for study.

# 8 Proposed methods of handling the Question or issue

Close coordination is essential with ITU-D programmes, as well as with other relevant ITU-D study Questions and ITU-R study groups dealing with ICT for climate change, and ITU-T Study Group 5.

a)	How?			
1)	Within a study group:			
	_	Question (over a multi-year study period)	$\checkmark$	
2) Within regular BDT activity:				
	-	Programmes	$\checkmark$	
	-	Projects	$\checkmark$	
	_	Expert consultants	$\checkmark$	
3)	In other ways – describe (e.g. regional, within other		_	
	organiz	rations, jointly with other organizations, etc.)	Ш	

### b) Why?

To ensure that the work and output of this study Question is not duplicated and that there is better collaboration among BDT, the other ITU Sectors, Sector Members and other United Nations agencies.

#### 9 Coordination and collaboration

The ITU-D study group dealing with this Question will need to coordinate with:

Relevant ITU-D Question(s)

These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

- Relevant BDT programme(s)
- Regional offices
- Relevant ITU-R and ITU-T study groups
- Relevant international, regional and scientific organizations with mandates relevant to this Question.

# 10 BDT programme link

Objective 2, Output 2.1.

### 11 Other relevant information

To be defined in the work plan.