

I n t e r n a t i o n a l T e l e c o m m u n i c a t i o n U n i o n

# ITU-T

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

WORLD TELECOMMUNICATION STANDARDIZATION  
ASSEMBLY  
Dubai, 20-29 November 2012

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## **Resolution 72 – Measurement concerns related to human exposure to electromagnetic fields**

ITU-T



## FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

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## RESOLUTION 72 (Rev. Dubai, 2012)

### Measurement concerns related to human exposure to electromagnetic fields

(Johannesburg, 2008; Dubai, 2012)

The World Telecommunication Standardization Assembly (Dubai, 2012),

*considering*

- a) the importance of telecommunications and information and communication technologies (ICT) for political, economic, social and cultural progress;
- b) that a significant part of the infrastructure needed to help bridge the digital divide between developed and developing countries<sup>1</sup> involves various wireless technologies;
- c) that there is a need to inform the public of the potential effects of exposure to electromagnetic fields (EMF);
- d) that an enormous amount of research has been carried out regarding wireless systems and health, and many independent expert committees have reviewed this research;
- e) that the International Commission on Non-Ionizing Radiation Protection (ICNIRP), the International Electrotechnical Commission (IEC) and the Institute of Electrical and Electronics Engineers (IEEE) are three among a number of pre-eminent international bodies in establishing measurement methodologies for assessing human exposure to EMF, and they already cooperate with many standards bodies and industry forums;
- f) that the World Health Organization (WHO) has issued fact sheets regarding EMF issues, including mobile terminals, base stations and wireless networks, referencing ICNIRP standards;
- g) Resolution 176 (Guadalajara, 2010) of the Plenipotentiary Conference, on human exposure to and measurement of electromagnetic fields;
- h) Resolution 62 (Hyderabad, 2010) of the World Telecommunication Development Conference, on measurement concerns related to human exposure to electromagnetic fields,

*recognizing*

- a) the work done within ITU Radiocommunication Sector (ITU-R) study groups on radiowave propagation, electromagnetic compatibility (EMC) and related aspects, including measurement methods;
- b) the work done within Study Group 5 of the ITU Telecommunication Standardization Sector (ITU-T) on techniques for taking radio-frequency (RF) measurements;
- c) that Study Group 5, in establishing measurement methodologies for assessing human exposure to RF energy, already cooperates with many participating standards organizations (PSOs),

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<sup>1</sup> These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

*recognizing further*

- a) that some publications about EMF effects on health create doubt among the population, in particular in developing countries;
- b) that, in the absence of regulation, people, in particular in developing countries, become more and more doubtful and are increasingly opposing the deployment of radio installations in their neighbourhoods;
- c) that the cost of the equipment used for assessing human exposure to RF energy is very high, and that the equipment is more likely to be affordable only in developed countries;
- d) that implementing such measurement is essential for many regulatory authorities, in particular in developing countries, in order to monitor the limits for human exposure to RF energy, and that they are called upon to ensure those limits are met in order to license different services,

*noting*

the similar activities carried out by other national, regional and international standards development organizations (SDOs),

*resolves*

to invite ITU-T, in particular Study Group 5, to expand and continue its work and support in this domain, including but not limited to:

- i) disseminating information related to this topic through organizing workshops and seminars for regulators, operators and any interested stakeholders from developing countries;
- ii) continuing to cooperate and collaborate with other organizations working on this topic and to leverage their work, in particular with a view to assisting the developing countries in the establishment of standards and in monitoring compliance with these standards, especially on telecommunication terminals;
- iii) cooperating on these issues with ITU-R Study Groups 1 and 6, and with Study Group 1 of the ITU Telecommunication Development Sector (ITU-D) in the framework of Question 23/1;
- iv) strengthening coordination with WHO so that any fact sheet relating to human exposure to electromagnetic fields is circulated to Member States as soon as it is issued,

*instructs the Director of the Telecommunication Standardization Bureau, in close collaboration with the Directors of the other two Bureaux, and within the available financial resources*

1 to support the development of reports identifying the needs of developing countries on the issue of assessing human exposure to EMF, and submit the reports as soon as possible to ITU-T Study Group 5 for its consideration and action in accordance with its mandate;

2 to hold workshops in developing countries with presentations and training on the use of equipment employed in assessing human exposure to RF energy;

3 to support developing countries while they establish their regional centres equipped with test benches for monitoring conformance of telecommunication terminal equipment and human exposure to electromagnetic waves using, among other things, the modalities listed in Resolutions 44 (Rev. Dubai, 2012) and 76 (Rev. Dubai, 2012) of this assembly, in the context of the development of the regional test centres and of Resolution 177 (Guadalajara, 2010) of the Plenipotentiary Conference,

*invites Member States and Sector Members*

to contribute actively to the work of Study Group 5 in providing relevant and timely information in order to assist developing countries in providing information and addressing measurement concerns related to RF exposure and electromagnetic fields,

*further invites Member States*

to adopt suitable measures in order to ensure compliance with relevant international recommendations to protect health against the adverse effect of EMF.