
WORKING GROUP OF THE PLENARY

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RESOLUTION 176 (REV. BUSAN, 2014)

HUMAN EXPOSURE TO AND MEASUREMENT OF ELECTROMAGNETIC FIELDS

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RESOLUTION 176 (~~GUADALAJARA, 2010~~ REV. BUSAN, 2014)

Human exposure to and measurement of electromagnetic fields

The Plenipotentiary Conference of the International Telecommunication Union
(~~Guadalajara, 2010~~ Busan, 2014),

recalling

- a) Resolution 72 (~~Johannesburg, 2008~~ Rev. Dubai, 2012) of the World Telecommunication Standardization Assembly, on measurement concerns related to human exposure to electromagnetic fields (EMF);
- b) Resolution 62 (~~Hyderabad, 2010~~ Rev. Dubai, 2014) of the World Telecommunication Development Conference, on measurement concerns related to human exposure to EMF;
- c) relevant resolutions and recommendations of the ITU Radiocommunication Sector (ITU-R) and ITU Telecommunication Standardization Sector (ITU-T);
- d) that there is ongoing work in the three Sectors relating to human exposure to electromagnetic fields, and that liaison and collaboration between the Sectors and with other expert organizations are important, in order to avoid duplication of effort,

considering

- a) that the World Health Organization (WHO) ~~and the International Commission on Non-Ionizing Radiation Protection (ICNIRP)~~ have the specialized health expertise and competence to assess the impact of radio waves on the human body;
- b) that WHO recommends exposure limits from international organizations such as the International Commission on Non-Ionizing Radiation Protection (ICNIRP);
- cb) that ITU has expertise in a mechanism to verify compliance with levels of radio signals by calculating and measuring the field strength and power density of radio signals;
- de) the high cost of equipment used for measuring and assessing human exposure to EMF;
- ed) that the considerable development in radio spectrum use has resulted in multiple sources of EMF emissions within any given geographic area;
- fe) the urgent need for regulatory bodies in many developing countries to obtain information on EMF measurement methodologies in regard to human exposure to radio-frequency energy, in order to establish national regulations to protect their citizens;
- g) that without adequate information, public awareness and/or appropriate regulation, people, particularly in developing countries, may have concerns about the effect of EMF on their health, which may result in increasing opposition to the deployment of radio installations;

fh) that guidelines on limits of exposure to EMF have been established by ICNIRP¹, the Institute of Electrical and Electronics Engineers (IEEE)² and the International Organization for Standardization/International Electrotechnical Commission (ISO/IEC) and that many administrations have adopted national regulations based on these guidelines; however there is a need to harmonize EMF guidelines for regulators and policy makers to help them formulate national standards;

ji) that most of the developing countries do not have the necessary tools to measure and evaluate the impact of Radio waves on the human body,

resolves to instruct the Directors of the three Bureaux

1 to collect and disseminate information concerning exposure to EMF, including on EMF measurement methodologies, in order to assist national administrations, particularly in developing countries, to develop appropriate national regulations;

2 to work closely with all the organizations in implementation of this resolution, as well as Resolution 72 (Rev. Dubai, 2012) of the World Telecommunication Standardization Assembly, Resolution 62 (Rev. Dubai, 2014) of the World Telecommunication Development Conference, in order to continue and enhance the technical assistance provided to Member States,

instructs the Director of the Telecommunication Development Bureau, in collaboration with the Director of the Radiocommunication Bureau and the Director of the Telecommunication Standardization Bureau

1 to ~~ascertain the requirement for, and as appropriate~~ conduct, regional seminars and workshops in order to identify the needs of developing countries and to build human capacity in regard to measurement of EMF related to human exposure to these fields;

2 to encourage Member States in the various regions to cooperate in sharing expertise and resources and identify a focal point or regional cooperation mechanism, including if required a regional centre, so as to assist all Member States in the region in measurement and training;

3 to encourage relevant organizations to continue undertaking necessary scientific studies to investigate possible health effects of EMF radiation on human body;

4 to formulate necessary measures and guidelines in order to help mitigate the possible health effects of EMF radiation on human body;

5 to encourage Member States to conduct periodic reviews to ensure that ITU Recommendations and other relevant international standards related to the exposure to EMF are followed,

¹ Guidelines for limiting exposure to time-varying electric, magnetic and electromagnetic fields (up to 300 GHz) – <http://www.icnirp.de/documents/emfgdl.pdf>.

² IEEE Std C95.1™-2005, IEEE standard for safety levels with respect to human exposure to radio frequency electromagnetic fields, 3 kHz to 300 GHz.

instructs the Director of the Telecommunication Standardization Bureau, in collaboration with the Director of the Telecommunication Development Bureau and the Director of the Radiocommunication Bureau

to participate in the Electromagnetic Field Programmes as part of collaborative efforts with other international organizations to encourage the development of international standards for EMF exposure, conducted by WHO,

instructs the Secretary-General, in consultation with the Directors of the three Bureaux

1 to prepare a report on the implementation of this resolution for submission to the ITU Council at each annual session for evaluation;

2 to provide a report to the next plenipotentiary conference on measures taken to implement this resolution²;

Invites Member States

1 to take the appropriate measures to ensure compliance with guidelines produced by ITU and other relevant international organizations with respect to exposure to EMF;

2 to implement sub-regional cooperation mechanisms for the acquisition of the needed equipment to measure EMF;

3 to conduct a periodic review to ascertain compliance with levels of radio signals by relevant entities, in accordance with ITU-T recommendations;

4 to raise public awareness of the health effects of human exposure to non-ionizing EMF, by conducting awareness-raising campaigns, holding workshops and publishing brochures on the subject.
