



THE RESEARCH INSTITUTE OF POSTS AND TELECOMMUNICATIONS

Section of Testing and Metrology



The Research Institute of Posts and Telecommunications offers to the customers following services in its laboratories:

Laboratory of radio equipment and electric safety:

Electric safety tests of electric and electronic equipment:

- isolating transformers and safety isolating transformers,
- output transformers of power supplies,
- equipment of cable distribution systems for television and sound signals,
- lights (except lights intended to the explosive environment), compact fluorescent lamps,
- audio, video and similar electronic equipment,
- electronic transducers for lamps,
- electric appliances for households,
- automatic equipment for household,
- IT equipment,
- uninterruptible power supplies,
- radio transmitters,
- low-voltage switchgears,
- primary cells,
- fire, heat and humidity tests of insulants,
- climatic tests in climatic range from -80 to $+150$ °C.



Laboratory of radio equipment services:

- measurement of radio equipment parameters in the laboratory and at transmitter sites,
- consultancy in the area of radio equipment,
- measurement of cable distribution systems,
- drawing up of technical specifications of radio interfaces,
- drawing up of methodologies for measurement of radio equipment,
- measurement of electromagnetic field in the range 5 Hz - 110 GHz (measurement at transmitters sites or in the laboratory),
- complete tests of radio equipment for purposes of conformity assessment and declaration of conformity,
- professional technical aid regarding conformity assessment, reviewing of documents necessary for drawing up and issuing of declaration of conformity pursuant to governmental provision No. 443/2001 Col. and pursuant to Directive R&TTE for affixing CE mark to the product,
- measurement and calculation of human exposure to electromagnetic fields,
- tests of all radio equipment in frequency range to 110 GHz according to customer's requirements or according to relevant standards and regulations,
- measurement of parameters of antennas at opened measuring point,
- measurement of parameters of antennas in frequency range to 110 GHz,
- assessment of DVB-T receivers.

Laboratory of electromagnetic compatibility:

EMC Laboratory disposes of modern technique and technology for purposes of measurement of electromagnetic compatibility of electric and electronic equipment. It is equipped with automated test systems, anechoic chamber 17,5 m x 12 m x 8,5 m and two screened chambers 3 m x 4 m x 2,5 m.



Executed tests:

- low-frequency interference to low-voltage distribution mains
 - harmonic currents
 - voltage fluctuation and flicker,
- disturbing voltage (9 kHz - 30 MHz),
- immunity to: electrostatic discharge, electromagnetic fields (80 MHz - 2,4 GHz), disturbance indicated by high-frequency field (150 kHz to 1000 MHz), electrical fast transients, magnetic fields on mains frequency, decreases, short interruptions and voltage fluctuations, electrical fast transients and surge impulses of vehicles.

Tested equipment:

- equipment of cable distribution systems for television and sound signals and interactive multimedia services,
- IT equipment,
- electric and electronic equipment for household,
- telecommunication and radiocommunication equipment,
- electrical appliances,
- medical and scientific equipment,
- industrial equipment,
- measuring and testing equipment,
- air and maritime equipment of security technique.

Laboratory of telecommunication equipment:

Executed tests:

- complete tests of network and terminal telecommunication equipment for purposes of conformity assessment,



- immunity tests of security components of equipment to overstrains and overcurrents,
- tests of electroacoustic parameters of voice analogue and digital and telecommunication networks,
- consultancy in the field of telecommunication equipment,
- education in the field of ISDN and SS7 signalizations, PHD, SDH, DWDM hierarchies, etc.,
- verification of conformity of technical security devices with security standard.

Calibration laboratory:

Calibrations:

- high-frequency devices in frequency range to 40 GHz,
- electric constants (voltage, current, resistance and capacity),
- devices intended for revisions of electric installations and appliances and tools of measuring equipment (power meters, power sensors, interference meters, frequency meters, oscilloscopes, multimeters, generators, etc.).



CONTACT:

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