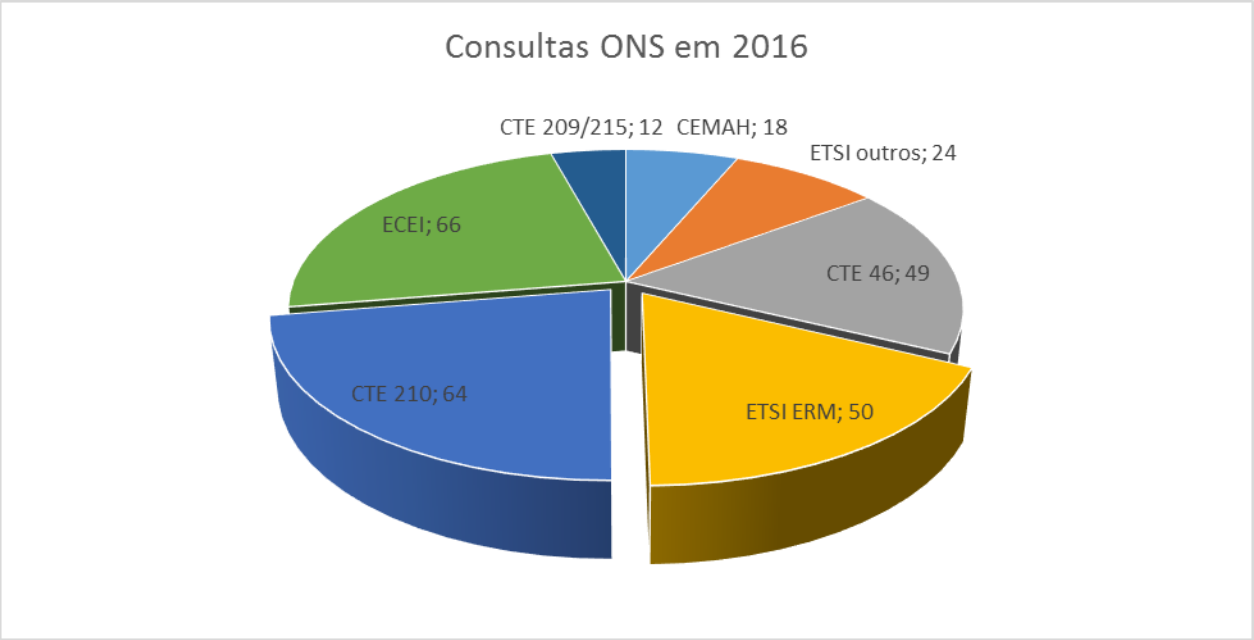
Atividade do Organismo de Normalização Setorial ANACOM no ano 2016



Em 2016, estiveram em funcionamento no âmbito de atuação do ONS ANACOM quatro comissões técnicas nacionais:

- CTE 209 - Redes de cabo para sinais de televisão, sinais de som e serviços interativos
- CTE 210 - Compatibilidade eletromagnética
- CTE 215 - Aspectos eletrotécnicos de equipamento de telecomunicações
- CTE 46 - Cabos, fios e guias de onda para equipamento de telecomunicações

Foram efetuadas **cerca de 280 consultas** no âmbito do Protocolo estabelecido entre o IPQ – Instituto Português da Qualidade e o ONS ANACOM.

Na base deste protocolo, o ONS ANACOM é o organismo de normalização setorial para as comunicações eletrónicas, compatibilidade eletromagnética e setor postal.

No enquadramento da atividade das comissões técnicas nacionais CTE 210 e CTE 46 do ONS ANACOM houve a participação ativa por vogais da ANACOM em reuniões do CENELEC, participações estas que atenderam os interesses da indústria nacional.

Principais assuntos debatidos em 2016 pelas comissões técnicas nacionais:

CTE 209 - Redes de cabo para sinais de televisão, sinais de som e serviços interativos

IEC 60728 - Cable networks for television signals sound signals and interactive services, nas partes da norma seguintes:

Part 2: Electromagnetic compatibility for equipment;

Part 3: Active wideband equipment for cable networks;

Part 12: Electromagnetic compatibility of systems;

Part 13-1: Bandwidth expansion for broadcast signal over FTTH system;

Part 3-2: Method of measurement of 5th order non-linearity for active electronic equipment using five carriers;

Part 101: System performance of forward paths loaded with digital channels only.

CTE 215 - Aspectos eletrotécnicos de equipamento de telecomunicações

EN 50600 - Information technology - Data centre facilities and infrastructures, nas partes da norma seguintes:

Part 4-1: Overview of and general requirements for key performance indicators

Part 4-2: Power Usage Effectiveness

Part 4-3: Renewable Energy Factor

Part 99-1: Recommended practices for energy management

EN 50667 - Information technology - Automated infrastructure management (AIM) systems - Requirements, data exchange and applications

EN 50174 - Information technology - Cabling installation:

Part 3: Installation planning and practices outside buildings

CTE 210 - Compatibilidade eletromagnética

CEN/CLC

TR 61000 - ELECTROMAGNETIC COMPATIBILITY (EMC) , nas partes seguintes:

Part 1-2: General - Methodology for the achievement of functional safety of electrical and electronic systems including equipment with regard to electromagnetic phenomena

Part 2-2: Environment - Compatibility levels for low-frequency conducted disturbances and signalling in public low-voltage power supply systems

Part 2-5: Environment – Description and classification of electromagnetic environments

Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)

Part 4-11: Testing and measurement techniques – Voltage dips, short interruptions and voltage variations immunity tests

Part 4-12:Testing and measurement techniques – Ring wave immunity test

Part 4-15: Testing and measurement techniques – Flickermeter – Functional and design specifications

Part 4-20 : Testing and measurement techniques - Emission and immunity testing in transverse electromagnetic (TEM) waveguides

Part 4-31:Testing and measurement techniques –AC mains ports broadband conducted disturbance immunity test

Part 4-39: Testing and measurement techniques – Radiated fields in close proximity – Immunity test

Part 5 - 10: Installation and mitigation guidelines - Guide to the protection of facilities against HEMP and IEMI

Part 6-1: Generic Standards - Immunity standard for residential, commercial and light-industrial

Part 6-2: Generic Standards - Immunity standard for industrial environments

Part 6-3: Generic standards – Emission standard for residential, commercial and light-industrial environments

Part 6-4: Generic standards - Emission standard for industrial environments

EN 50561-2: Power line communication apparatus used in low voltage installations - Radio disturbance characteristics - Limits and methods of measurement - Part 2: Apparatus for access-network

EN 300 674 - Transport and Traffic Telematics (TTT); Dedicated Short Range Communication (DSRC) transmission equipment (500 kbit/s / 250 kbit/s) operating in the 5,8 GHz Industrial, Scientific and Medical (ISM) band:

Part 2: Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU; Sub-part 1: Road Side Units (RSU)

CISPR:

CISPR 11 - Industrial, scientific and medical equipment –Radio Frequency disturbance characteristics – Limits and methods of measurement

CISPR 14 - Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus

Part 1: Emission

CISPR 15 - Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment

CISPR 16 - equipment and methods for measuring disturbances and immunity to them at frequencies above 9 kHz, nas partes seguintes:

Part 1-2: Ancillary equipment – Conducted disturbances

Part 1-4: Ancillary equipment – Radiated disturbances

Part 1-5: Antenna calibration test sites for 30 MHz to 1 000 MHz

Part 1-6: EMC-antenna calibration

Part 2-1: Conducted disturbance measurements

Part 2-3: Radiated disturbance measurements

Part 4-2: Uncertainty in EMC measurements

Part 4-4: Statistics of complaints and a model for the calculation of limits

Part 4-5: Conditions for the use of alternative test methods

CISPR TR 18 - Radio interference characteristics of overhead power lines and high-voltage equipment

Part 1: Description of phenomena

Part 2: Methods of measurement and procedure for determining limits

Part 3: Code of practice for minimizing the generation of radio noise

CISPR 25 - Vehicles, boats and internal combustion engines - Radio disturbance characteristics - Limits and methods of measurement for the protection of on-board receivers

CISPR 35 - EMC of multimedia equipment- immunity requirements

ETSI

Âmbito geral das normas de ETSI votadas pela CTE 210:

Advanced Surface Movement Guidance and Control System (A-SMGCS)

Amplifiers and active antennas for TV broadcast reception in domestic premises

Broadcast Sound Receivers;

Digital Terrestrial TV Broadcast Receivers and Transmitters

Electromagnetic Compatibility (EMC) standard for radio equipment and services

Ground Based Augmentation System (GBAS) VHF ground-air Data Broadcast (VDB)

Induction loop systems intended to assist the hearing impaired

Intelligent Transport Systems (ITS)

Land Mobile Service

Maritime low power VHF personal locating beacons employing Digital Selective Calling (DSC);

Navigation radar for use on non-SOLAS vessels

Navigation radar used on inland waterways

Portable Very High Frequency (VHF) radiotelephone equipment

Radio Frequency Identification Equipment

Radio telephone transmitters and receivers for the maritime mobile service operating in the VHF bands used on inland waterways

Short Range Devices (SRD)

Technical characteristics and methods of measurement for equipment for generation, transmission and reception of Digital Selective Calling (DSC)

Telecommunication network equipment

Transport and Traffic Telematics (TTT)

Ultra Low Power Active Medical Implants (ULP-AMI)

Ultra Low Power Medical Data Service (MEDS) Systems

Ultra-High Frequency (UHF) on-board vessels communications systems and equipment

VHF air-ground Digital Link (VDL) Mode 2

VHF radiotelephone equipment for general communications and associated equipment for Class "D" Digital Selective Calling (DSC)

VHF transmitters and receivers as Coast Stations for GMDSS and other applications in the maritime mobile service

Wideband transmission systems

Wireless Microphones

Wireless Video Links

CTE 46 - Cabos, fios e guias de onda para equipamento de telecomunicações

EN 50288 - Multi-element metallic cables used in analogue and digital communications and control

Part 12-1: Sectional specification for screened cables characterized from 1 MHz up to 2 000 MHz - Horizontal and building backbone cables

EN 50289 - Communication cables - Specifications for test methods

Part 1-1: Electrical test methods - General requirements

Part 1-8: Electrical test methods – Attenuation

Part 1-9: Electrical test methods - Unbalance attenuation (transverse conversion loss TCL transverse conversion transfer loss TCTL)

Part 1-11: Electrical test methods - Characteristic impedance, input impedance, return loss

Part 4-16: Environmental test methods - Circuit integrity under fire conditions

EN 50290 - Communication cables

Part 2-20: Common design rules and construction – General

Part 2-29: Common design rules and construction - Crosslinked polyethylene insulation compounds: instrumentation, control and field bus cables

Part 2-34: Common design rules and construction - Polyethylene sheathing compound for outdoor optical fibre cables

Part 2-35: Common design rules and construction - Polyamide sheathing compound

Part 2-36: Common design rules and construction - Crosslinked Silicone rubber insulation compound

IEC /TR 62839 - Environmental declaration

Part 2: Optical/copper telecom accessories products specific rules

IEC 60096 - Radio frequency cables

Part 0-1: Guide to the design of detail specifications - Coaxial cables

IEC 60153 - Hollow metallic waveguides

Part 4: Relevant specifications for circular waveguides

IEC 60154 – Relevant specifications for Flanges for waveguides

IEC 60189 - Low-frequency cables and wires with PVC insulation and PVC sheath

Part 1: General test and measuring methods

IEC 60966 - Radio frequency and coaxial cable assemblies

Part 1: Generic specification – General requirements and test methods

Part 2-4: Detail specification for cable assemblies for radio and TV receivers – Frequency range 0 MHz to 3 000 MHz, IEC 61169-2 connectors

Part 2-5: Detail specification for cable assemblies for radio and TV receivers – Frequency range 0 MHz to 1 000 MHz, IEC 61169-2 connectors

Part 2-6: Detail specification for cable assemblies for radio and TV receivers – Frequency range 0 MHz to 3 000 MHz, IEC 61169-24 connectors

IEC 61156 - Multicore and symmetrical pair/quad cables for digital communications

Part 1-4: Assessment of the conductor heating in bundled cables due to the deployment of power transmission based on IEEE802.3 PoE-regime

Part 1-6: Exploratory DC-resistance values of floor-wiring and work-area cables for digital communications

Part 5: Symmetrical pair/quad cables with transmission characteristics up to 1 000 MHz - Horizontal floor wiring - Sectional specification

Part 6: Symmetrical pair/quad cables with transmission characteristics up to 1 000 MHz - Work area wiring - Sectional specification

Part 9: Cables for channels with transmission characteristics up to 2 GHz – Sectional specification

Part 10: Cables for cords with transmission characteristics up to 2 GHz – Sectional specification

Part 11: Cables for 1 Gb/s over one pair – Sectional specification

IEC 61169 - Radio frequency connectors

Part 5: Sectional specification for CATV trunk and distribution cables

Part 54: Sectional specification for coaxial connectors with 10 mm inner diameter of outer conductor, nominal characteristic impedance 50 Ω, series 4,3-10

Part 59: Sectional specification for type L32-4 and L32-5 threaded muti-pin radio-frequency connectors

Part 60: Sectional specification for series SMPM RF coaxial connectors

IEC 61196 - Coaxial communication cables

Part 1-113: Electrical test methods – Test for attenuation constant

Part 1-206: Environmental test methods - Climatic sequence

Part 1 - 303: Mechanical test methods test methods - Test for plating thickness

Part 6-2: Detail specification for 75-4 type CATV drop cables

Part 6-3: Detail specification for 75-5 type CATV drop cables

Part 6-4: Detail specification for 75-7 type CATV drop cables

Part 58: Sectional specification for RF coaxial connectors with blind-mate coupling – Characteristic impedance 50 Ω (type SBMA)

IEC 61935 - Specification for the testing of balanced and coaxial information technology cabling

Part 1: Installed balanced cabling as specified in ISO/IEC 11801-1 and related standards

Part 1-1: Additional requirements for the measurement of Transverse Conversion Loss and Equal Level Transverse Conversion Transfer Loss

Part 1-2: Additional requirements for measurement of resistance unbalance with field test instrumentation

Part 2: Cords as specified in ISO/IEC 11801 and related standards

IEC 62153 - Metallic communication cable test methods

Part 4 -6: Electro Magnetic Compatibility (EMC) — Surface transfer impedance – line injection method

Part 4 -8: Electromagnetic compatibility (EMC) – capacitive coupling admittance

Part 4-9: Electromagnetic compatibility (EMC) – Coupling attenuation of screened balanced cables, triaxial method

Part 4-16: Electromagnetic compatibility (EMC) – Extension of the frequency range to higher frequencies for transfer impedance and to lower frequencies for screening attenuation measurements using the triaxial set-up

IEC 62783 - Twinax cables for digital communications

Part 1: family specification

Part 2: Twinax cables for digital communications – Part 2: Cabel for Ethernet-over-twinax physical interfaces

IEC 62807 – Hybrid Cables

Part 1: Generic specification