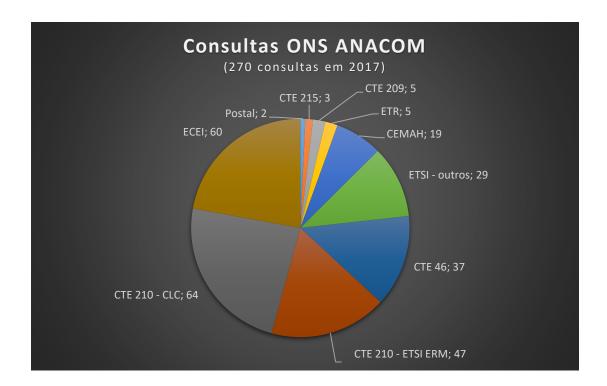
Atividade do Organismo de Normalização Sectorial ONS ANACOM no ano de 2017



Em 2017, 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 215 - Aspectos eletrotécnicos de equipamento de telecomunicações

CTE 210 - Compatibilidade eletromagnética

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

Outros assuntos foram ainda objeto de consulta como sejam a normalização postal, ETR – Equipamentos de transmissão para radiocomunicações, CEMAH – campos eletromagnéticos no ambiente humano e ECEI – áudio, vídeo, sistemas multimédia e equipamento.

Foram efetuadas **cerca de 270 consultas** no âmbito do Protocolo estabelecido entre o IPQ – Instituto Português da Qualidade e o ONS ANACOM.

Na base deste <u>protocolo</u>, 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 votados 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 2-3: LTE (4G) Interference Mitigation Filters

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

CTE 215 - Aspetos eletrotécnicos de equipamento de telecomunicações

EN 50174 - Information technology - Cabling installation, nas partes da norma seguintes:

Part 1: Installation specification and quality assurance

Part 2: Installation planning and practices inside buildings

Part 3: Installation planning and practices outside buildings

TR 50600 - Information technology - Data centre facilities and infrastructures:

Part 99-1: Recommended practices for energy management

EN 50173 - Information technology - Generic cabling systems:

Part 1: General requirements

Part 2: Office spaces

Part 3: Industrial spaces

Part 4: Homes

Part 5: Data centre spaces

Part 6: Distributed building services

CTE 210 - Compatibilidade eletromagnética

- 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
- CISPR 15 Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment
- CISPR 16 Radio disturbance and immunity measuring apparatus and methods
- CISPR 32 Electromagnetic compatibility of multimedia equipment Emission requirements
- CISPR 36 Electric and hybrid road vehicles Radio disturbance characteristics Limits and methods of measurement for the protection of off-board receivers below 30 MHz

IEC 61000 – Electromagnetic compatibility (EMC):

- Part 1-8: Phase angles of harmonic current emissions and voltages in the public supply networks, and future expectation
- Part 2-2: Environment Compatibility levels for low frequency conducted disturbances and signaling in public low-voltage power supply systems
- Part 3-2: Limits Limits for harmonic current emissions (equipment input current ≤16 A per phase)
- Part 3-3: Limits Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current <= 16 A per phase and not subject to conditional connection
- Part 4-3: Testing and measurement techniques Radiated, radio-frequency, electromagnetic field immunity test
- Part 4-11: Testing and measurement techniques Voltage dips, short interruptions and voltage variations immunity tests
- Part 4-15: Testing and measurement techniques Flicker meter Functional and design specifications
- Part 4-18: Testing and measurement techniques Damped oscillatory wave immunity test
- Part 4-20: Testing and measurement techniques Emission and immunity testing in transverse electromagnetic (TEM) waveguides
- Part 4-25: Testing and measurement techniques HEMP immunity test methods for equipment and systems
- Part 4-36: Testing and measurement techniques IEMI immunity test methods for equipment and systems
- Part 6-3: Generic standards Emission standard for residential, commercial and light-industrial environments

ETSI

Âmbito geral das normas de ETSI votadas pela CTE 210:

Transport and Traffic Telematics (TTT)

Broadcast Sound Receivers

Short Range Devices (SRD)

Land Mobile Service

Wideband transmission systems

Technical characteristics and methods of measurement for equipment for generation, transmission and reception of Digital Selective Calling (DSC) in the maritime MF, MF/HF and/or VHF mobile service

Wireless Microphones

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

Avalanche Beacons

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

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

Portable Very High Frequency (VHF) radiotelephone equipment for the maritime mobile service operating in the VHF bands

Cordless audio devices

Electromagnetic Compatibility (EMC) standard for radio equipment and services

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

Transmitting equipment for the Amplitude Modulated (AM) sound broadcasting service

Transmitting equipment for the Frequency Modulated (FM) sound broadcasting service

Meteorological Aids (Met Aids)

Short Range Devices (SRD) using Ultra Wide Band technology (UWB)

Navigation radar used on inland waterways

Digital Terrestrial TV Transmitters

Intelligent Transport Systems (ITS)

Maritime low power personal locating devices employing AIS

Induction loop systems intended to assist the hearing impaired

Amplifiers and active antennas for TV broadcast reception in domestic premises

Electro Magnetic Compatibility (EMC) standard for combined and/or integrated radio and non-radio equipment

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

EN 50117 - Coaxial cables:

- Part 1: Generic specification
- Part 9-2: Sectional specification for coaxial cables for analogue and digital signal transmission Indoor drop cables for systems operating at 5 MHz 3 000 MHz
- Part 9-3: Sectional specification for coaxial cables for analogue and digital signal transmission Indoor drop cables for systems operating at 5 MHz 6 000 MHz
- Part 10-1: Sectional specification for coaxial cables for analogue and digital signal transmission Outdoor drop cables for systems operating at 5 MHz 1 000 MHz
- Part 10-2: Sectional specification for coaxial cables for analogue and digital signal transmission Outdoor drop cables for systems operating at 5 MHz 3 000 MHz
- Part 11-1: Sectional specification for coaxial cables for analogue and digital signal transmission Distribution and trunk cables for systems operating at 5 MHz 1 000 MHz
- Part 11-2: Sectional specification for coaxial cables for analogue and digital signal transmission Distribution and trunk cables for systems operating at 5 MHz 2 000 MHz
- **IEC 61156** Multicore and symmetrical pair/quad cables for digital communications:
- Part 1-3: Electrical transmission parameters for modelling cable assemblies using symmetrical pair/quad cables
- 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

IEC 61169 - Radio-frequency connectors:

- Part 1: Generic specification General requirements and test methods
- Part 1-2: Electrical test methods- insertion loss
- Part 1-4: Electrical test methods- voltage standing wave ratio, return loss and reflection coefficient
- Part 2: Sectional specification for MQ4 series circular connector

Part 24: Sectional specification - Radio frequency coaxial connectors with screw coupling, typically for use in 75 Ohms cable networks (type F)

Part 61: Specification for coaxial connectors with 0.8 mm inner diameter of outer conductor, nominal characteristic impedance 50 ohms

IEC 61196 - Coaxial communication cables:

- Part 1-206: Environmental test methods Climatic sequence
- Part 1-113: Electrical test methods Test for attenuation constant
- Part 1-303: Mechanical test methods Test for silver and tin plating thickness
- Part 5: Sectional specification for CATV trunk and distribution cables
- Part 6-2: Detail specification for 75-4 type CATV drop cables
- Part 6-3: Detail specification for type 75-5 CATV drop cables
- Part 6-4: Detail specification for 75-7 type CATV drop cables
- Part 6-5: Detail specification for CATV drop cables with screening class A++
- Part 11-4: Detail specification for 50-12(1/2") type corrugated tube outer conductor semi-rigid cables with foamed polyethylene (PE) dielectric
- Part 11-5: Detail specification for 50-22(7/8") type corrugated tube outer conductor semi-rigid cables with foamed polyethylene (PE) dielectric
- **IEC 61935** Testing of balanced communication cabling in accordance with ISO/IEC 11801 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: Installed Cabling Additional requirements for measurement of resistance unbalance with field test instrumentation
- Part 2: Cords as specified in ISO/IEC 11801 and related standards
- Part 4-8: Electromagnetic compatibility (EMC) capacitive coupling admittance
- Part 4 9: Electro Magnetic Compatibility (EMC) Coupling attenuation of screened balanced cables, triaxle method
- Part 4-17: Reduction factor