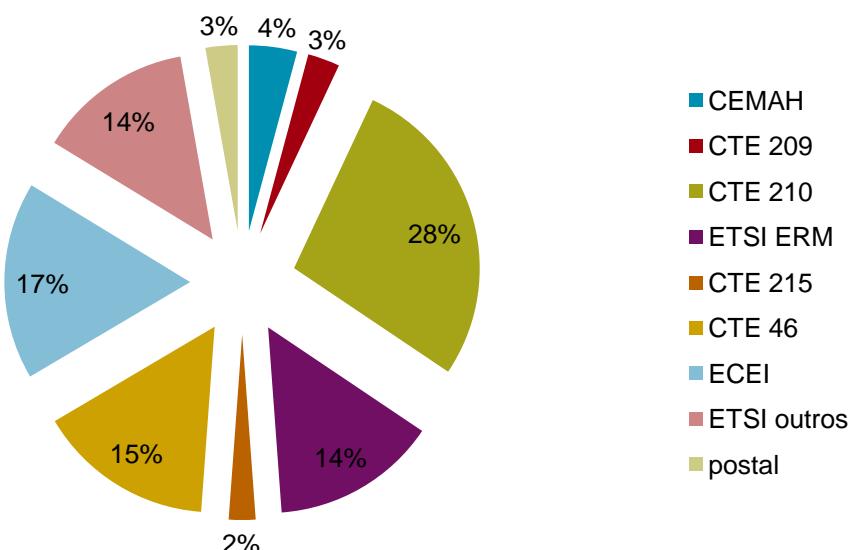


## Actividade ONS ICP-ANACOM em 2010

Em 2010 a actividade desenvolvida no âmbito do ONS ICP-ANACOM – Organismo de Normalização para as telecomunicações, actividade postal e compatibilidade electromagnética, caracterizou-se por cerca de 200 consultas, distribuídas por temática de acordo com o seguinte gráfico:

### Organismo de Normalização Sectorial Consultas aos Comitês Técnicos em 2010



Estas consultas têm origem nos Organismos de Normalização ETSI<sup>1</sup>, CEI<sup>2</sup>, CEN<sup>3</sup> e CENELEC<sup>4</sup>, sendo participadas pelas Comissões Técnicas Electrotécnicas Nacionais:

**CTE 46 - Cabos, fios e guias de onda para equipamento de telecomunicações<sup>5</sup>**

**CTE 210 – Compatibilidade Electromagnética<sup>6</sup>**

**CTE 215 - Aspectos electrotécnicos de equipamento de telecomunicações<sup>7</sup>**

**CTE 209 - Redes de cabo para sinais de televisão, sinais de som e serviços interactivos<sup>8</sup>**

<sup>1</sup> ETSI: European Telecommunications Standards Institute - <http://www.etsi.org>

<sup>2</sup> IEC: Commission Electrotechnique Internationale - <http://www.iec.ch/>

<sup>3</sup> CEN: European Committee for Standardization - <http://www.cen.eu/>

<sup>4</sup> CENELEC: European Committee for Electrotechnical Standardization - <http://www.cenelec.eu>

<sup>5</sup> <http://www.anacom.pt/render.jsp?categoryId=166702>

<sup>6</sup> <http://www.anacom.pt/render.jsp?categoryId=182542>

<sup>7</sup> <http://www.anacom.pt/render.jsp?categoryId=333110>

<sup>8</sup> <http://www.anacom.pt/render.jsp?categoryId=333105>

**Não estando ainda constituídas formalmente Comissões Técnicas no âmbito de CEMAH - Impacto das radiações electromagnéticas no ambiente humano - e actividade postal, o ONS ICP-ANACOM promove consultas a grupos de interessados.**

## **RELATÓRIO DE ACTIVIDADE DA CTE 46 EM 2010**

### **CTE 46 - Cabos, fios e guias de onda para equipamento de telecomunicações<sup>9</sup>**

A CTE 46 participou na votação e emitiu comentários para os seguintes documentos normativos com origem no IEC:

- no âmbito do TC 46 – Cables, wires, waveguides, R.F. connectors, R.F. and microwave passive components and accessories

IEC 62037 Ed. 1.0: Passive r.f. and microwave devices, intermodulation level measurement:

IEC 61935 Ed. 3.0: Specification for the testing of balanced and coaxial information technology cabling

IEC 62153-4-14 Ed. 1.0: Metallic communication cable test methods

- no âmbito do SC 46A – Coaxial Cables

IEC 61196: Coaxial communication cables:

IEC 60096 Ed. 3.0: Radio Frequency Cables

- no âmbito do SC 46C – Wires and Symmetric Cables

IEC/TS 61156-1-x Ed. 1.0: Multicore and symmetrical pair/quad cables for digital communication

IEC/TR 62222 Ed. 2.0: Fire performance of communication cables installed in buildings - Update new methods of fire retardancy

- no âmbito do SC 46F - RF and microwave passive components

IEC 61169-14 Ed.1.0: Radio-frequency connectors

A CTE 46 participou na votação e emitiu comentários para os seguintes documentos normativos com origem no CENELEC:

- EN 50288: Multi-element metallic cables used in analogue and digital communication and control
- EN 50441: Cables for indoor residential telecommunication installations
- EN 50289: Communication cables - Specifications for test methods

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<sup>9</sup> <http://www.anacom.pt/render.jsp?categoryId=166702>

## **RELATÓRIO DE ACTIVIDADE DA CTE 210 EM 2010**

### **CTE 210 – Compatibilidade Electromagnética<sup>10</sup>**

A CTE 210 participou na votação e emitiu comentários para os seguintes documentos normativos com origem no IEC:

#### **no âmbito do TC 77 - Electromagnetic compatibility**

(Compatibilidade electromagnética)

IEC 61000-1-6 Ed.1: ELECTROMAGNETIC COMPATIBILITY (EMC) – Part 1-6: General – Guide to the assessment of measurement uncertainty

IEC 61000-2-5: Electromagnetic compatibility (EMC) – Part 2-5: Environment – Classification of electromagnetic environments

IEC 61000-6-7 Ed. 1: ELECTROMAGNETIC COMPATIBILITY (EMC) - Part 6-7: Generic standards - Immunity requirements for safety-related systems and equipment intended to perform functions in a safety-related system (functional safety) in industrial environments

#### **no âmbito do TC 77A - Low frequency phenomena**

(Fenómenos de baixa frequência - ca<= 9 kHz)

IEC 61000-3-2: Electromagnetic compatibility (EMC) – Part 3-2: Limits – Limits for harmonic current emissions (equipment input current  $\leq 16$  A per phase)

IEC 61000-3-12 Ed.2: ELECTROMAGNETIC COMPATIBILITY (EMC) – Part 3-12: Limits – Limits for harmonic currents produced by equipment connected to public low voltage systems with input current  $> 16$  A and  $\leq 75$  A per phase

IEC 61000-3-15 Ed.2: Electromagnetic compatibility (EMC) - Part 3-15: Limits - Assessment of low frequency electromagnetic immunity and emission requirements for dispersed generation systems in LV network

IEC 61000-4-11 Ed. 2.0: Electromagnetic compatibility (EMC) – Part 4-11: Testing and measurement techniques – Voltage dips, short interruptions and voltage variations immunity tests

IEC 61000-4-15 Ed.2: Electromagnetic compatibility (EMC) – Part 4-15: Testing and measurement techniques – Flickermeter – Functional and design specifications

IEC 61000-4-22 Ed.1: Electromagnetic compatibility (EMC) – Part 4-22: Testing and measurement techniques – Radiated emissions and immunity measurements in fully anechoic rooms (FARs)

IEC 61000-4-30 Ed. 3.0: Electromagnetic compatibility (EMC) : Testing and measurement techniques – Power Quality Measurement Methods"

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<sup>10</sup> <http://www.anacom.pt/render.jsp?categoryId=182542>

**no âmbito do TC 77B - High frequency phenomena**

(Fenómenos de alta frequência - ca > 9 kHz)

IEC 61000-4-3 A2 Ed 3.0: Measurement uncertainty due to test instrumentation

IEC 61000-4-4 – Electromagnetic compatibility (EMC) – Part 4-4 : Testing and measurement techniques – Electrical fast transient/burst immunity test

IEC 61000-4-6 - ELECTROMAGNETIC COMPATIBILITY (EMC) – Part 4-6:Testing and measurement techniques – Conducted disturbances, induced by radio-frequency fields immunity test

IEC 61000-4-20 – Electromagnetic compatibility (EMC) - Part 4-20: Testing and measurement techniques – Emission and immunity testing in transverse electromagnetic (TEM) waveguides

**no âmbito do TC 77C - High power transient phenomena**

(Fenómenos transitórios de elevada potência)

IEC 61000-2-13: Electromagnetic compatibility (EMC) – Part 2-13: IEMI Immunity Test Methods for Equipment and Systems

**no âmbito do CISPR - International special committee on radio interference**

(Comité Internacional especializado em interferências radioeléctricas)

**CISPR/SC A - Radio-interference measurements and statistical methods**

(Medição de interferência radioeléctrica e métodos estatísticos)

CISPR 16-1-1 A1 Ed.3: Inclusion of FFT based test instrumentation

CISPR 16-1-4 Ed.3: Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-4: Radio disturbance and immunity measuring apparatus – Antennas and test sites for radiated disturbance measurements

CISPR 16-1-5: "Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-5: Radio disturbance and immunity measuring apparatus – Antenna calibration test sites for 30 MHz to 1 000 MHz

CISPR 16-1-6: Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-6: Radio disturbance and immunity measuring apparatus – EMC-antenna calibration

CISPR 16-2-1 A1 Ed.2 : Specifications for measurements using FFT-based measuring instrumentation

CISPR 16-2-3 Ed.3: Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-3: Methods of measurement of disturbances and immunity - Radiated disturbance measurements

Proposed revision of CISPR 16-2-3 on application of CMADs

CISPR 16-3 Ed.3.0: Specification for radio disturbance and immunity measuring apparatus and methods - Part 3: CISPR technical reports

CISPR 16-4-2 Ed.2: Specification for radio disturbance and immunity measuring apparatus and methods – Part 4-2: Uncertainties, statistics and limit modelling – Measurement instrumentation uncertainty

CISPR 17 Ed.2 : Methods of measurement of the suppression characteristics of passive EMC filtering devices

**CISPR/SC B - Interference relating to industrial, scientific and medical radio-frequency apparatus, to other (heavy) industrial equipment, to overhead power lines, to high equipment and to electric traction**

(Interferências ocasionadas por aparelhos de radiofrequência industriais, científicos e médicos, noutro equipamento industrial (pesado), em linhas de distribuição de energia, suportadas em postes, em equipamento de alta voltagem e de tracção eléctrica)

CISPR 11 Ed. 5: Selection criteria for the minimum separation distance between EUT and measurement antenna

CISPR TR 18-1 Ed. 2: Radio interference characteristics of overhead power lines and high-voltage equipment - Part 1: Description of phenomena

CISPR TR 18-2 Ed. 2: Radio interference characteristics of overhead power lines and high-voltage equipment - Part 2: Methods of measurement and procedure for determining limits

CISPR TR 18-3 Ed. 2: Radio interference characteristics of overhead power lines and high-voltage equipment - Part 3: Code of practice for minimizing the generation of radio noise

**CISPR/SC D - Electromagnetic disturbances related to electric/electronic equipment on vehicles and internal combustion engine powered devices**

(Perturbações electromagnéticas relativas a equipamento eléctrico/electrónico instalado em veículos e outros dispositivos com motores de combustão interna)

CISPR 25 f2 Ed. 4.0: Vehicles, boats and internal combustion engines - Radio disturbance characteristics - Limits and methods of measurement for the protection of on-board receivers Annex on ALSE Performance Verification 150 kHz - 1 GHz

**CISPR/SC F - Interference relating to household appliances tools, lighting equipment and similar apparatus**

(Interferências relativas a aparelhos electrodomésticos, ferramentas, equipamento de iluminação e similares)

CISPR 14-1 Am. 2 Ed.5: Inclusion of induction cooking appliances

**CISPR/SC H - Limits for the protection of radio services**

(Limites para protecção de serviços Radioeléctricos)

IEC 61000-6-4 A1 Ed.2: Electromagnetic compatibility (EMC) - Part 6-4: Generic standards – Emission standard for industrial environments

**CISPR/SC I – Electromagnetic compatibility of information technology equipment, multimedia equipment and receivers**

(Compatibilidade electromagnética para equipamento de tecnologias de informação, equipamento multimédia e receptores)

"CISPR 24 Ed.2: Information technology equipment – Immunity characteristics – Limits and methods of measurement"

"CISPR 32 Ed. 1: Electromagnetic compatibility of information technology equipment, multimedia equipment and receivers

A CTE 210 participou na votação e emitiu comentários para os seguintes documentos normativos com **origem no CENELEC**:

TR 50538 - Guide to EMC Directive conformity of equipment designed for military purposes

EN 55020 - Sound and television broadcast receivers and associated equipment - Immunity characteristics - Limits and methods of measurement -Interpretation of Clause I.7

EN 55022 - Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement

A CTE 210 participou na votação e emitiu comentários de trabalhos com origem no **comité de ERM (Electromagnetic compatibility and Radio spectrum Matters) do ETSI** no âmbito de:

- Digital Selective Calling (DSC) in the maritime MF, MF/HF and/or VHF mobile service
- Short Range Devices (SRD)
- Short Range Devices (SRD) using Ultra Wide Band technology (UWB)
- Land Mobile Service
- Satellite Earth Stations and Systems (SES)
- Base Stations (BS)
- Terrestrial Trunked Radio (TETRA)
- AERO
- Road Transport and Traffic Telematics (RTTT)
- Transmitting equipment for the digital television broadcast service, Terrestrial (DVB-T)
- Intelligent Transport Systems (ITS)
- Data Link Services (DLS) System

## **RELATÓRIO DE ACTIVIDADE DA CTE 215 EM 2010**

### **CTE 215 - Aspectos electrotécnicos de equipamento de telecomunicações<sup>11</sup>**

A CTE 215 participou na votação e emitiu comentários para os seguintes documentos normativos com **origem no CENELEC/TC 215:**

EN 50173 - Information technology - Generic cabling systems:

- Part 1: General requirements
- Part 2: Office premises
- Part 3: Industrial premises
- Part 4: Homes
- Part 5: Data centres

EN 50174 - Information technology - Cabling installation

- Part 1: Installation specification and quality assurance
- Part 2: Installation planning and practices inside buildings

EN 50310 - Application of equipotential bonding and earthing in buildings with information technology equipment

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<sup>11</sup> <http://www.anacom.pt/render.jsp?categoryId=333110>

## **RELATÓRIO DE ACTIVIDADE DA CTE 209 EM 2010**

### **CTE 209 - Redes de cabo para sinais de televisão, sinais de som e serviços interactivos<sup>12</sup>**

A CTE 209 participou na votação e emitiu comentários para os seguintes documentos normativos com **origem no IEC/TC 100 (TAS)**:

IEC 60728- Cable networks for television signals, sound signals and interactive services:

- Part 3: Active wideband equipment for cable networks
- Part Part 3-1: Methods of measurement of non-linearity for full digital channel load
- Part 6: Optical equipment
- Part 11: Cable networks for television signals, sound signals and interactive
- Part 13-1: Bandwidth Expansion for Broadcast Signal over FTTH system

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<sup>12</sup> <http://www.anacom.pt/render.jsp?categoryId=333105>

## **RELATÓRIO DE ACTIVIDADE DE CEMAH EM 2010**

### **CEMAH - Impacto das radiações electromagnéticas no ambiente humano**

**Na temática CEMAH tem sido consultado um grupo de entidades interessadas (ainda não constituídas em comissão técnica), o qual tem votado ou comentado os seguintes trabalhos:**

#### **trabalhos provenientes do TC 106X do CENELEC**

EN 50554 - Basic standard for the in-situ assessment of a broadcast site related to general public exposure to radio frequency electromagnetic fields

EN 50527-2-1 - Procedure for the assessment of the exposure to electromagnetic fields of workers bearing active implantable medical devices - Part 2-1: Specific assessment for workers with cardiac pacemakers

#### **trabalhos provenientes do TC 106 do IEC**

IEC 62209 Ed.1: Human exposure to radio frequency fields from hand-held and bodymounted wireless communication devices – Human models, instrumentation, and procedures –

Part 2: Procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)

IEC 62232: Determination of RF field strength and SAR in the vicinity of radiocommunication base stations for the purpose of evaluating human exposure

IEC 62479 Ed.1: Assessment of the compliance of low power electronic and electrical apparatus with the basic restrictions related to human exposure to electromagnetic fields (10 MHz - 300 GHz)

IEC 62669 DTR: Case studies supporting IEC 62232 Ed.1 - Determination of RF field strength and SAR in the vicinity of radiocommunication base stations for the purpose of evaluating human exposure

Novos documentos normativos (“new working item”) introduzidos:

- Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Body from Wireless Communications Devices, 30 MHz - 6 GHz: General Requirements for using the Finite-Difference Time:
  - Domain (FDTD) Method for SAR Calculations
  - Domain (FDTD) Method for SAR Calculations of Mobile Phones
- Guidance for evaluating exposure from multiple electromagnetic sources: Specific Requirements for assessing the Specific Absorption Rate (SAR) from multiple transmitters used in close proximity to the human head
- Specific Absorption Rate (SAR) in the Human Body from Wireless Communications Devices: Specific Requirements for Finite Difference Time Domain (FDTD) Modelling of Exposure from Vehicle Mounted Antennas

## **RELATÓRIO DE ACTIVIDADE NORMATIVA POSTAL EM 2010**

**Na temática de normalização postal tem sido consultado um grupo de entidades interessadas (ainda não constituídas em comissão técnica), o qual votou e/ou comentou em 2010 os seguintes trabalhos provenientes do CEN/TC 331 e UPU:**

Novos documentos normativos (“new working item”) introduzidos:

- CEN/TC 331 - N1020 - Activation of a preliminary new work item Postal services — Open Interface between Machine Control and Reading
- CEN/TC 331 - N1018 - Extensible Common Structure and Representation for Postal Rates
- CEN/TC 331 - N1019 - Addresses and Automatic Identification of Items — Extensible Postal Product Model and Language (EPPML)
- CEN/TC 331 – N1031 - Circulation of 1st Working Draft of WI 00331083 – Postal services — Open Interface between Machine Control and Reading Coding System — MC/RC-Interface
- CEN/TC 331 - N1032 - Postal services — Open interface – Sortplan
- CEN/TC 331 - N1033 - Postal Services – Hybrid Mail – Functional Specification for postal registered electronic mail

CEN/TS15523 – Postal service — Statement of mailing submission

CEN/TR15524 – Postal Services - Customer-directed Information including Track and Trace - General concepts and definitions

CEN/TR 14142-2 - Postal Services - Address databases - Part 2: Element mapping conventions, template design considerations, address templates and rendition instructions

CEN/TS 15121-1 - Postal Services - Hybrid Mail:

Part 1: Secured electronic postal services (SePS) interface specification - Concepts, schemas and operations

Part 2: Secured electronic postal services (SePS) interface specification - ECPM Service

EN 14482 - Postal service - Trays for international letter mail - Test methods and performance requirements

EN 14142-1 - Postal services - Address databases - Part 1: Components of postal addresses